The Pacific Coast Architect

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THE PACIFIC COAST ARCHITECT

J. A. DRUMMOND - - - - - - - - - - Editor and Publisher

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EDITORIAL

The War Versus American Industry

For the past five or six weeks there has been a subject of absorbing interest to the citizens of the United States and that is: What effect will the war have on the industries of this country? How will the gigantic struggle affect business?

There has been talk of increased cost of living; the closing down of mills; the paralysing of all new development; the taking away of the means of subsistence of hundreds of thousands, the suspension of building and so on down the line of pessimism.

Present and actual results—well, that indeed is another story. One thing is certain—those pessimists have been routed. The world has not come to an end and most of us are still able to get three square meals a day.

While it may be true that certain lines of endeavor have suffered, on the other hand many phases of industry have prospered. The outstanding features of how the war has helped this country is seen in the tremendous sales of automobiles, horses, and other supplies, to the warring nations, the resumption of activities in long-stilled factories to supply domestic demand threatened by the stoppage of importations, and, and of far-reaching importance, the opening of wonderfully rich trade fields in South America.

The results of the European conflict on American industries will not be determined today, nor for many a day. Anyone attempting to make such a prophecy will make a mistake. In the meanwhile, however, let us get together and not lose sight of any opportunity that may present itself. Such opportunities should be embraced at once and made permanent factors in the business life of this nation; they should not be allowed to slip through our hands upon the cessation of hostilities and revert to former fields. If we accomplish this much we shall be making headway and American industry need have no fear that the war will bring on a deluge of hard times—as the pessimist would have you believe.

Bungalow Building in California

California easily leads in the production of the ideal bungalow, not only in quantity but in quality. In the building of this class of bungalow it has been well said that "California leads—others follow."

However, there are reasons for the above statement, generally well known. In the first place the equable climate of California particularly lends itself to the adaptation of the bungalow as a means of dwelling and, as a result thereof, California architects do not have to face the many and complex obstacles that might be said to face designers of such dwellings in other parts of the country. It is not necessary, as is the case in other sections of the country to plan particularly and specifically for preservation against the elements, most often to the detraction of value judged from an artistic standpoint.

Then again the rich and varied coloring of California landscape offers an excellent background, and blends to admirable advantage with the many-colored hues, now so popular in exterior finishes of many of the newer types of bungalows.

Assuredly the California architect has decided advantages over his fellow worker of other climes, when it comes to building bungalows and, for this reason, it is not the idea of the writer to imply that he is especially better fitted for the task than the co-worker located elsewhere. The facts are that the California architect's natural facilities are a thousand fold better and more agreeable than those confronting the builder elsewhere. That these natural facilities have been appreciated and taken advantage of is readily attested by California building.

California bungalows might be said to have a style peculiarly their own, but, notwithstanding, the type of construction has been copied quite extensively in certain sections of the Eastern States. This statement may sound fallacious but its verity is vouched for by authorities, not only within the State of California, but in the East as well.

♣ ♣ ♣

Important Experiments Consummated

The engineering experiment station of the University of Illinois recently issued a bulletin giving the results of six years' studies on the best methods of correcting acoustical defects of auditoriums. The auditorium of that institution was used for the purpose. Echoes were located by means of an alternating current arc light, a beam from which, accompanied by the hissing sound of the arc, was directed to various parts of the room. The paths of the light reflection were traced and verified by the sound. This plan within the auditorium itself, followed by careful studies in the laboratory, served to correct the acoustical properties of this school auditorium which, at the start, were pronounced very wretched.

The Chronology of an Office Building

"In time of war prepare for peace," or to paraphrase the saying of another great man, come all ye who listen with credulity to the whispers of fancy and pursue with eagerness the phantoms of hope, who expect that age will perform the promises of youth, and that the deficiencies of the present day will be supplied by the morrow, at-

Sky-line of buildings in San Francisco built since 1906 by Willis Polk & Co. The Hobart Building in the center.

tend to the history of the construction of a modern office building!

When it is remembered that San Francisco, situated as it is upon the western edge of our continent, is at a disadvantage in point of time of from six to eight weeks, in the delivery of structural steel, the added freight cost thereof, lapse of time in transit, and loss of time in exchange of information, shop drawings and other details, then the record herewith presented equals, if it does not excel, that of similar performances in the East.

The rapid construction of an office building usually impresses the public as being something little short of marvelous, but a glimpse behind the scenes would soon convince the public that the most marvelous thing in modern construction would be a lack of rapidity in progress.

In the construction of the Hobart Building just completed in San Francisco the following schedule of dates, giving its chronological history, may be of interest:

May 24, 1913—Hobart Estate Co. decide to build.
July 3, 1913—Preliminary plans adopted.
Oct. 2, 1913—Working plans completed.
Nov. 26, 1913—Financial plan accepted.
Dec. 2, 1913—Contract signed for structural steel.
Dec. 18, 1913—Contract signed for excavation and foundation.
Jan. 16 to 26, 1914—Balance of contracts signed.
Mar. 14, 1914—Erection of steel commenced.
Aug. 31, 1914—First tenant moves in, five and one-half months from commencement of erection.
Nov. 1, 1914—Building completed, eleven months from date of first contract.

The construction of this building occasioned much comment and some criticism, it being alleged that it was conducted in a reckless manner, one critic expressing the opinion that no greater crime against the public had ever been committed. In reply to one of these complaints the Architects advised the Hobart Estate Company that the City Building Department, the Fire Marshal, and the State Industrial Accident Commission, had all expressed their satisfaction at the unusual care that had been exercised and at the precautions that had been taken to guard against accidents.

The inside history of this apparently remarkable performance is here given:

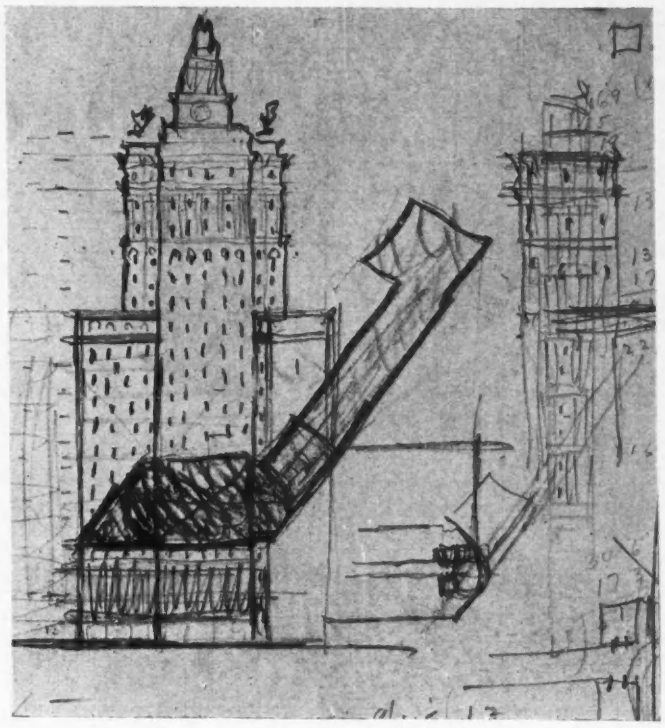
For example, during the construction of the building, owing to its great height, and the high winds then prevailing (during March and April), every effort was made to prevent liquid concrete from blowing over adjoining streets. Canvas protections and guards were erected, the winds tearing these guards as fast as erected, away from the windward side of the building over the edge of the other side of the building for a distance of blocks, and, in stripping concrete forms, many chips and small pieces of scantling were lifted by the winds and carried away. The blowing off of workmen's hats was so frequent that

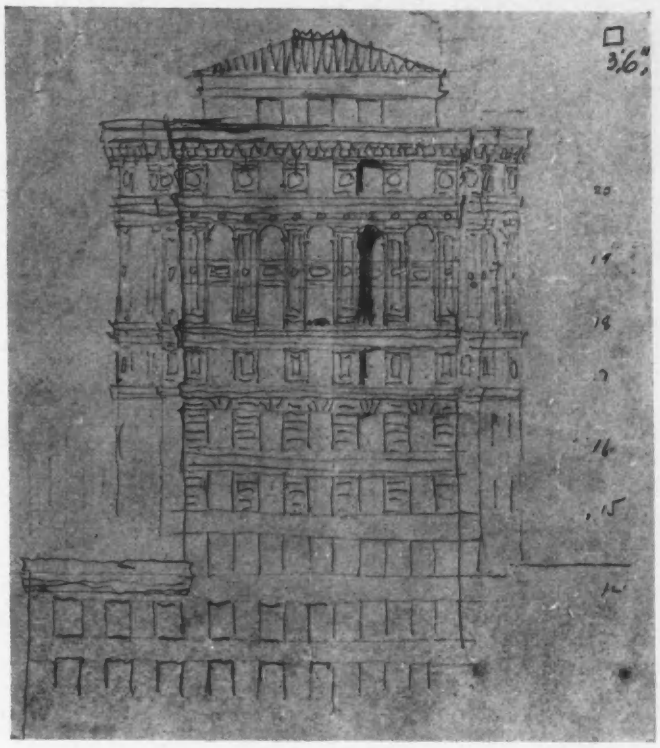
FROM "A STREET IN SAN FRANCISCO."
DRAWN BY WILLIS POLK.

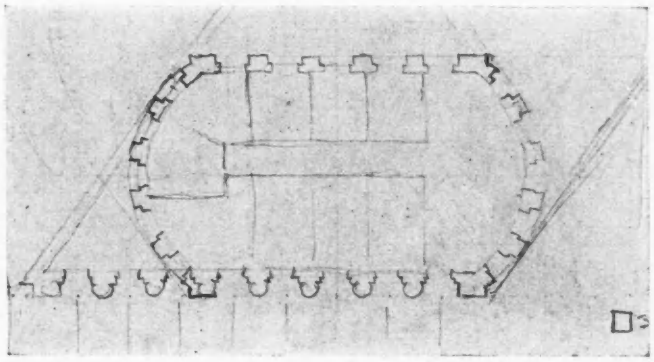
Pen-and-ink sketch of Market Street drawn in 1900 by Mr. Polk. The old Chronicle Building, the old Palace Hotel and the old Hobart Building are shown in this sketch.

small boys in adjacent streets did a thriving business in recovering same.

In view of the complaints made, it might be observed that the record of actual accidents on this building were







The above are from Mr. Polk's original studies on quadrille paper. During these studies Mr. Polk came to the conclusion that it would be just as cheap to build 21 stories on the Market Street end of the property, as it would be to build 12 stories through to Sutter Street. By this decision the Sutter Street end of the property was reserved as an unimproved asset, and the tower offices, being more desirable, commanded higher rentals.

far below the average of such accidents on buildings in general. Therefore, it should not be assumed, the Architects claim, that any carelessness existed, or that any accidents ensued on account of, or traceable to, efforts that were made to complete the work without interruption.

Rapidity or speed seemed to have been employed in excess, but as a matter of fact no undue haste or speed were employed. It should be remembered that the energy of the workmen engaged and their ability for accomplishing their given tasks was no greater than that of men employed on buildings in general, nor greater than such men usually possess.

In other words, rapidity in construction did not represent the inordinate ambition of the Architects, unmindful of the lives and limbs of other people, to hurry things; but represented on their part a practical demonstration of the value of a pre-conceived scheme of construction, all elements thoroughly co-ordinated. Under such a method no interruption in progress was expected. When no such interruption occurred, rapidity of construction seemed to ensue. The answer is simple—early final completion was achieved not by rapidity in construction but by steadiness of progress.

Equally important, it should also be noted that from the investment or financial point of view, the construction of this building also appears to have been something wonderful. At first, a twelve-story building covering the entire property, which extends through from Market Street to Sutter Street, was proposed. It was found that such a building, containing many interior, therefore less desirable rooms, would cost as much as a twenty-two story building covering half the lot with many exterior or more desirable rooms. In other words, for the same capital investment a higher rental value was obtained and the Sutter Street end of the property retained for future improvement.

Also, the development of the tower idea, i. e., a tall building on an inside lot, resulted in the production of a symmetrical skyline, an effect not ordinarily obtained in a building on an inside lot. In studying the elevations of this building, the evolution of the tower idea led to the elimination of any special treatment of the Market Street front, between the lower stories and the upper stories.

Pencil drawing by Mr. C. K. Bonestel, Jr. This drawing made before the construction of the building may be favorably compared with a photograph of the building in the opposite column taken from the same point of view.

On account of the height of this building it was thought that it provided office space in excess of market requirements; that it would tend to depreciate the office market; in other words, that this building could only be fully occupied at the expense of other buildings. This promise cannot be maintained when it is remembered that the entire office space in the Hobart Building represents less than one per cent of the total existing office space already occupied in this city. If no allowance, whatever, be made for an increased demand for office space, the tax on other buildings in this case will not exceed one per cent; therefore anyone lacking confidence in the future of San Francisco, or unduly influenced by the prevailing financial and business depression, or in ignorance of the above facts, should, before discouraging the construction of buildings of this character, remember that the pessimist never builds, whereas the optimist does.

Perhaps the most notable facts in connection with this building are that its final cost is about one thousand dollars less than the original estimate, and that its completion was accomplished within a previously-fixed, specified time. This final cost includes nearly $100,000 worth of betterments not contemplated at the time the original estimate was made. It also includes the deduction from the contract price of about $55,000 worth of items that were not required or necessary for successful construction and finish; for example—while the original plans showed concrete soffit fireproofing of the structural steel beams, such fireproofing of the beam soffits was omitted in the contracts, and lath and plaster fireproofing substituted therefor at a substantial saving in cost.

This substitution led to Mr. Polk's famous controversy with the Building Department and the mayor of the city. It seems that the Building Department, noting that the original plans showed concrete soffit fireproofing, undertook to insist that such concrete soffit fireproofing should be installed in the building. Mr. Polk called to their attention the fact that the building law did not require concrete soffit fireproofing, but permitted lath and plaster soffit fireproofing.

The misunderstanding that arose therefrom afforded much amusement and lent some doubt to the readers of the daily press. It is needless to say that the Building Department could not compel the Hobart Estate to put in concrete soffit fireproofing and that they finally accepted lath and plaster as provided.

Now, as to concrete fireproofing of beam soffits versus lath and plaster fireproofing, it does not follow that concrete fireproofing is better because it is more expensive; on the contrary, while lath and plaster fireproofing is cheaper, Mr. Polk contends that it is better, for the reason that concrete fireproofing of beam soffits will directly transmit heat waves to the structural steel.

PHOTOGRAPHIC VIEW OF HOBART BUILDING.

whereas lath and plaster fireproofing of beam soffits with its air spaces interrupts such transmission of heat.

Years ago concrete fireproofing not only of beam soffits but of all structural steel members, was considered as vital not only to the fireproofing of steel, but also to its

protection against corrosion. It was thought that by hermetically sealing steel in concrete, no corrosive action detrimental to the structural integrity of a building could ensue.

The fires which destroyed the cities of San Francisco and Baltimore revealed many conditions of a practical nature that theretofore had remained in the field of purely theoretical conjecture. These led Mr. Polk, so he informs us, to the following conclusions:

First—That the sealing of structural steel hermetically was not essential.

Second—That concrete soffit fire protection was detrimental rather than beneficial.

Third—That concrete floor construction, including the haunches of the beams, had, in addition to its mere fireproof qualities, an element of structural strength. While the building law in general makes no allowance whatever for such element of added strength, practice has demonstrated that concrete so employed adds materially to the strength of the beams. It is, therefore, economical in principle and when intelligently employed, produces a material saving in the cost of a building.

This controversy between the Architects and Building Department directed the general attention of the public to the construction of this building so that it received closer scrutiny and more general inspection than such buildings usually receive. The Architects naturally invited inspection from all sides, especially from hostile sources, and it must be said that they succeeded in purchasing considerable free inspection.

In the design of this building many unique and original problems were encountered; for example, under the charter of the city of San Francisco, it is not permitted that any base course or other detail project beyond the street line. Ordinarily, in such an entrance as that to the Hobart Building, either the face of the building would have to set back from the street in order to permit of the projections of the architrave around the entrance, or else such projections would have to be omitted. In this case the Architects not only maintained the face of the building at the street line, but succeeded in creating the impression of a projecting architrave by simply sinking same into the surface of the building, preserving appearances in all respects.

Again the regulations of the Post Office Department are extremely inflexible regarding the installation of mail chutes; for example, the mail chute must extend continuously in a vertical line from the top to the bottom of the building. In this building it was found that on account of structural beams that the only possible location of the mail chute on the upper floor would be out of symmetry in the main entrance vestibule where it was desired to maintain an artistic effect. It being impossible to move the mail chute over on the upper floors on account of the beams, it seemed that the artistic effect in the main entrance vestibule would have to be sacrificed. This difficulty was overcome at last in the most simple manner. The solution consisted merely of concealing the mail chute behind the ornamental marble finish of the vestibule and enlarging the size of the chute so that without interrupting its perpendicularity the exposed glass face of the chute could be placed in the symmetrical artistic center of the marble pilaster.

Further, in most buildings, overhead machinery, smoke stacks, steam exhaust, and vent pipes, are permitted to disfigure the sky line. In the case of the Hobart Building, without additional cost, all such overhead necessities were artistically treated if not entirely concealed as is shown on the elevations and structural diagrams published herewith.

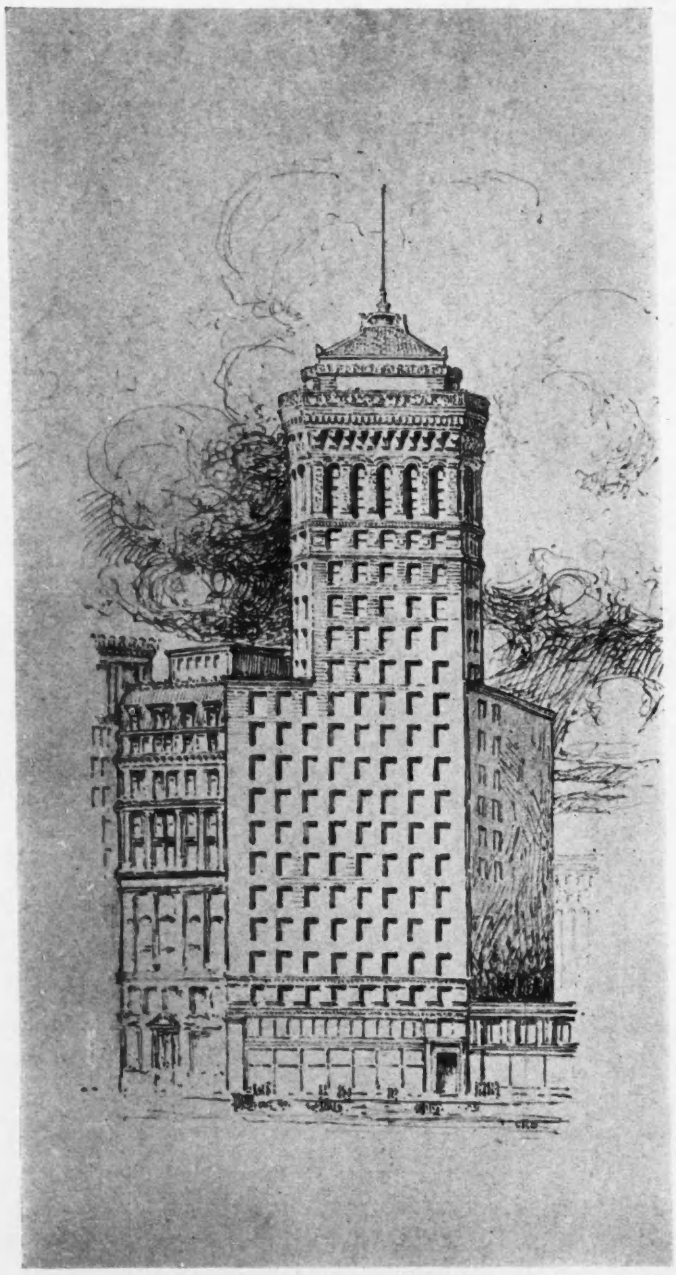
Old Hobart Building, on the site of the new building. Mr. W. S. Hobart, California pioneer, and founder of the Hobart Estate, purchased this property, it is said, for the reason that it faced on Market Street at the head of Second Street. At that time Second Street was the principal street of the city, and the vista from Rincon Hill looking northeasterly along Second Street made the Hobart Building the most conspicuous object to be seen.

This building is also unique in that it is entirely independent of the public water service or the outside gas or electric service, the building being equipped with its own storage battery, motor generators, and deep well

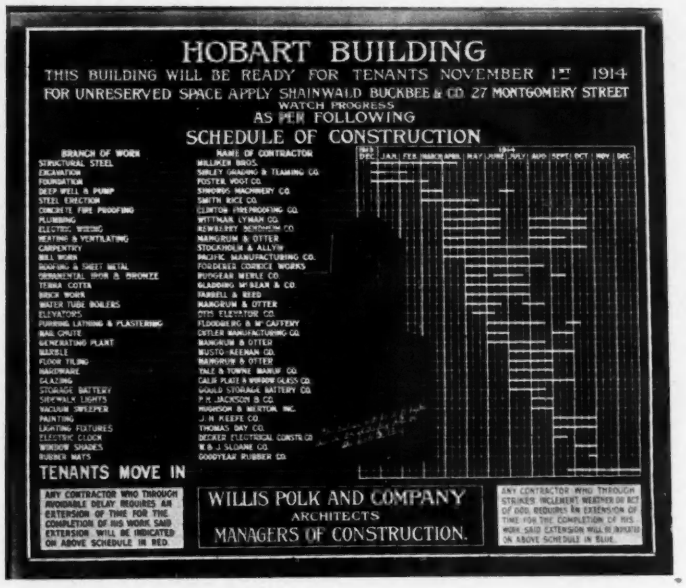
pump. Light, heat, power, water, and ventilation is entirely provided from within.

The mechanical equipment of the building includes a complete independent steam and electric generating plant together with an electric storage battery for the furnishing of the night service and the carrying of peak loads. Steam is generated in two high pressure water tube safety boilers and supplied to two 35 k. w. General Electric steam turbines, direct connected to 250 volts electric generators. The storage battery is designed to float on the line and provided with motor-driven booster and regulator to hold a predetermined even output on the generator.

Exhaust steam from the turbine and auxiliaries is circulated by means of a wet vacuum return system for the heating of building and hot water supply.



Architect's perspective drawing of final design. Photograph of building as executed shown on opposite page. As a rule perspective drawings look but little like the executed work. In this case these illustrations speak for themselves.



There is installed a motor-driven deep well pump and well for the independent supply of water for flushing purposes.

Hot and cold water is supplied to all basins, the height of the building requiring for economical operation the installing of two independent pressure systems. A separate 5,000-gallon roof tank supplies water for fire department hose reels throughout the building.

The elevator service of building is furnished by three high-speed ball-bearing electric traction passenger elevators equipped with full flash light system.

In building construction, all of the work is, as a rule included under one general contract, the general contractor dealing directly with the owner and the Architect, while the thirty-five odd sub-contractors deal only with the general contractor. This method being usually preferred for the reason that it is supposed that the general contractor not only has a superior advantage in purchasing and managing, but that he can control and direct the various sub-contractors to advantage.

On the other hand, Willis Polk & Co. have made it a practice, in addition to their regular duties as Architects, to absorb and perform all the functions of the general contractor. This they claim has eliminated considerable friction and has resulted in great savings, all advantages and savings accruing directly to the owner.

Co-ordination of effort, and rapidity of construction under this system is more easily attained. Sub-contractors, especially the more reputable ones, are enabled to complete their work in a shorter period of time, and consequently may engage at closer terms under such a system, with more certainty of early completion and final payment.

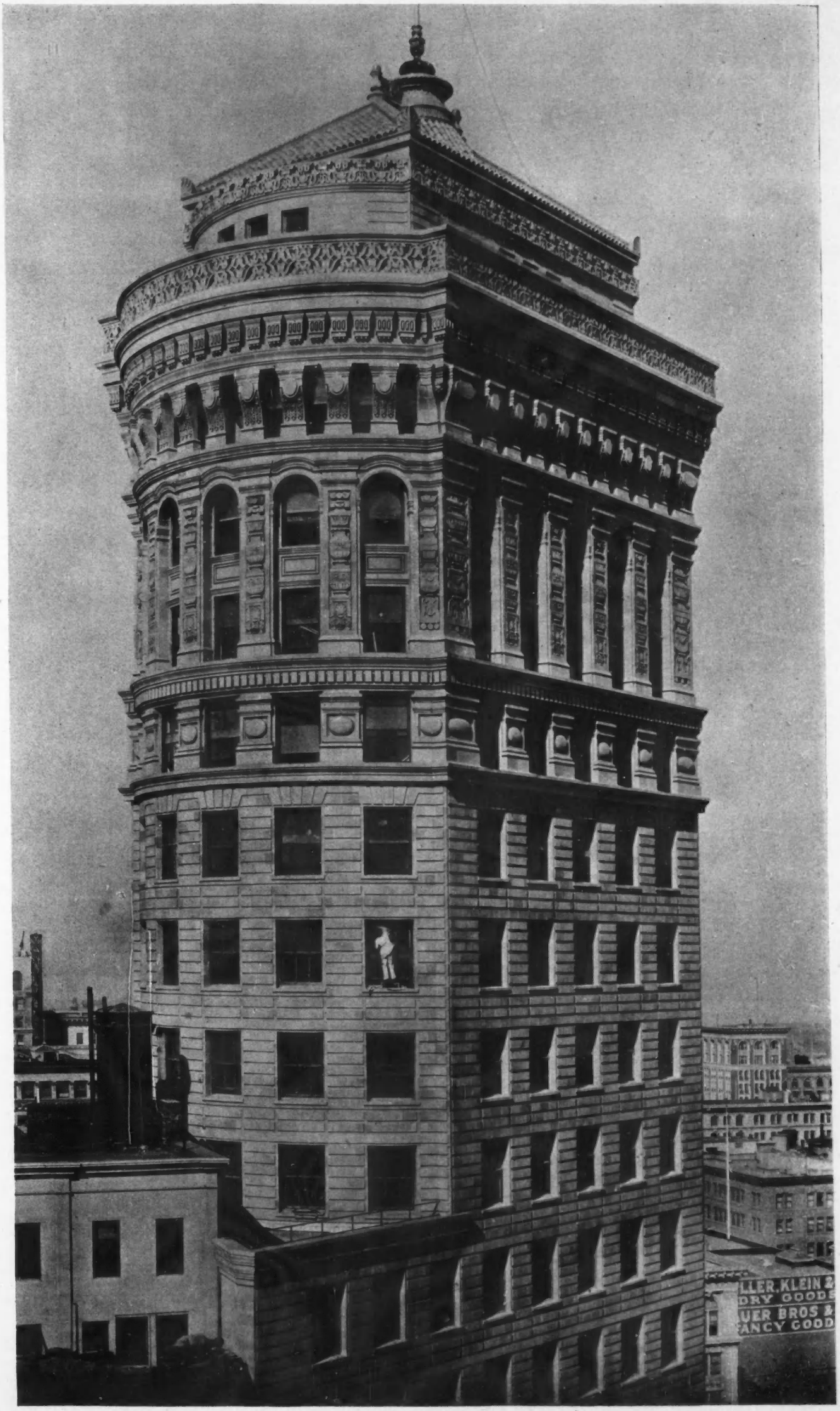
No addition to, or deduction from the work, is ever ordered unless agreed upon by the contractor, owner and Architect, and set forth in writing, and no payments on account are ever otherwise made. This rule rigidly enforced prevents disputes; final payments are the easiest payments to be made as there remains absolutely nothing to be audited or adjusted.

In the case of the Hobart Building, the Architects desire to express their keen appreciation of the uniform co-operation of the high-class firms who participated with them in the completion of this work. This includes all of the thirty-five contractors engaged, with perhaps but one exception.

(Continued on page 205.)

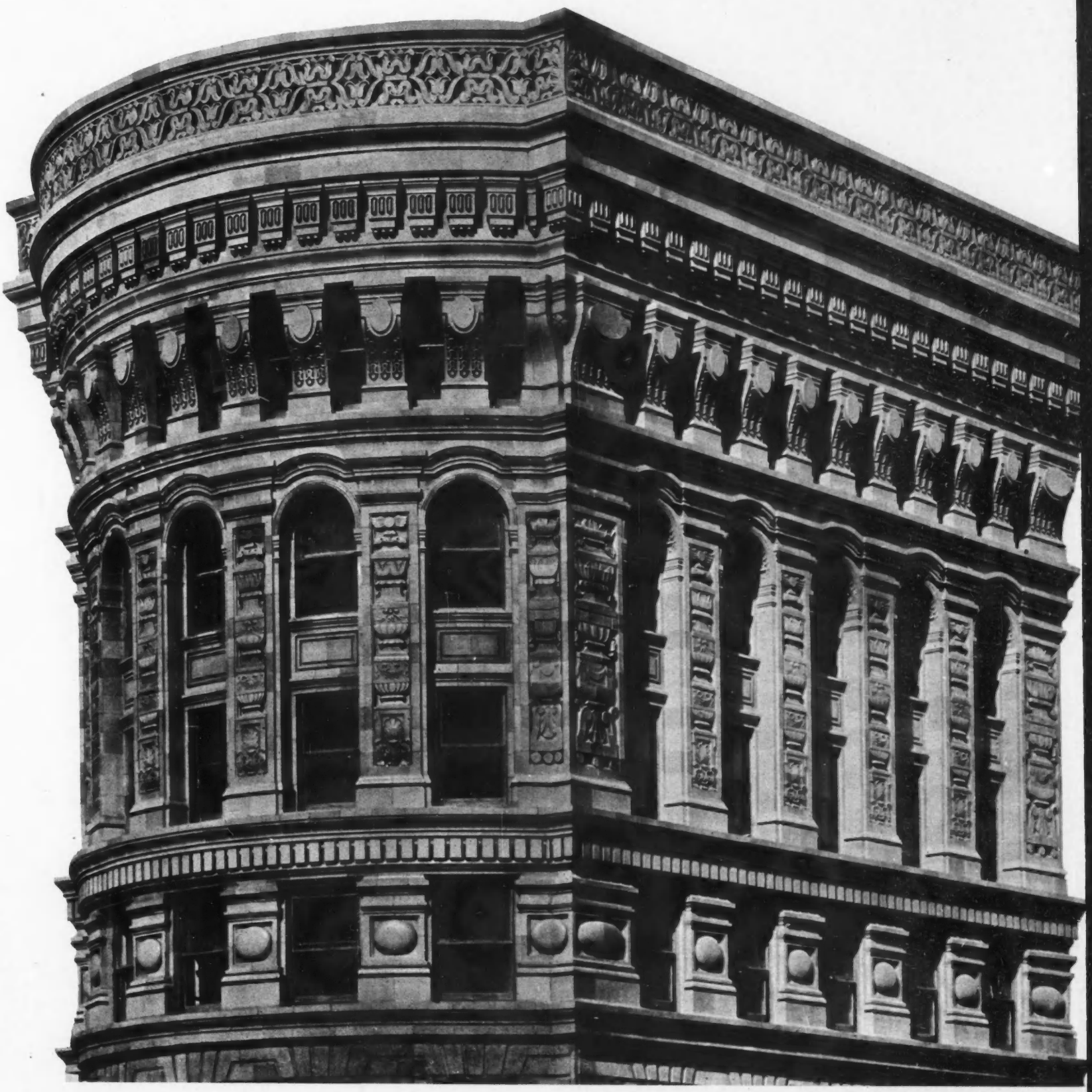
Hobart Building, San Francisco
Willis Polk & Co., Architects, San Francisco

Photo, Gabriel Moulin



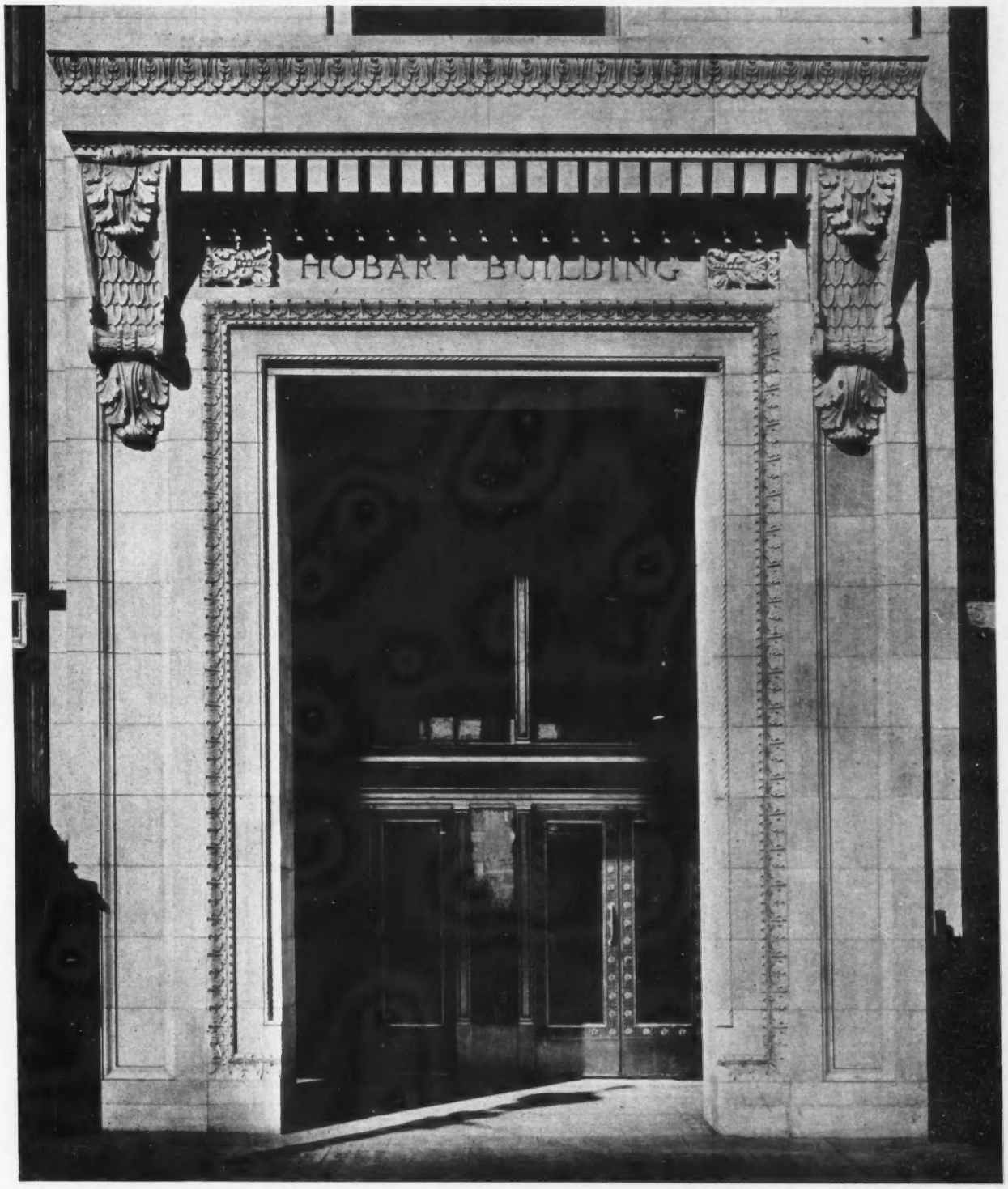
Detail of Tower, Hobart Building, San Francisco
Willis Polk & Co., Architects, San Francisco

Photo, Gabriel Moulin



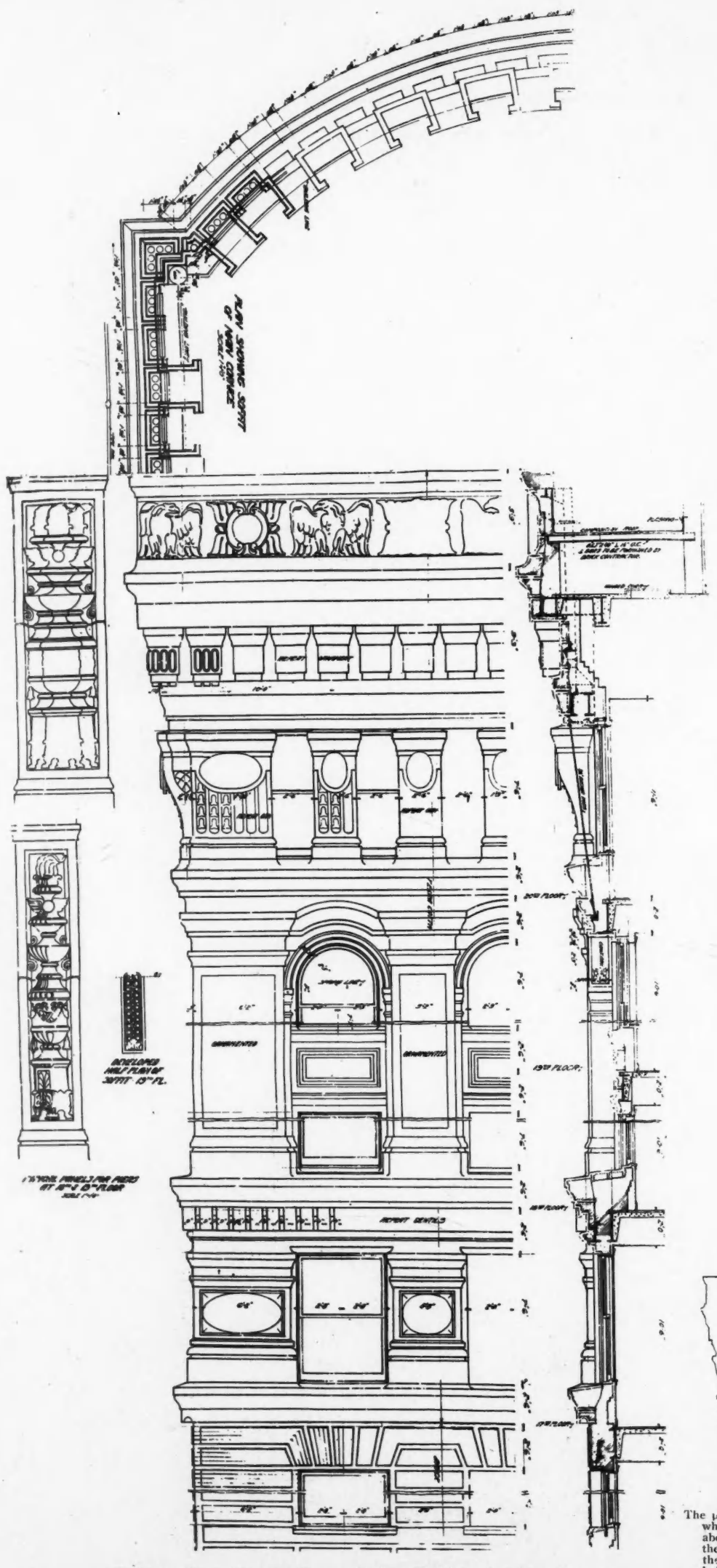
Detail of Upper Stories, Hobart Building, San Francisco
Willis Polk & Co., Architects, San Francisco

Photo, Gabriel Moulin

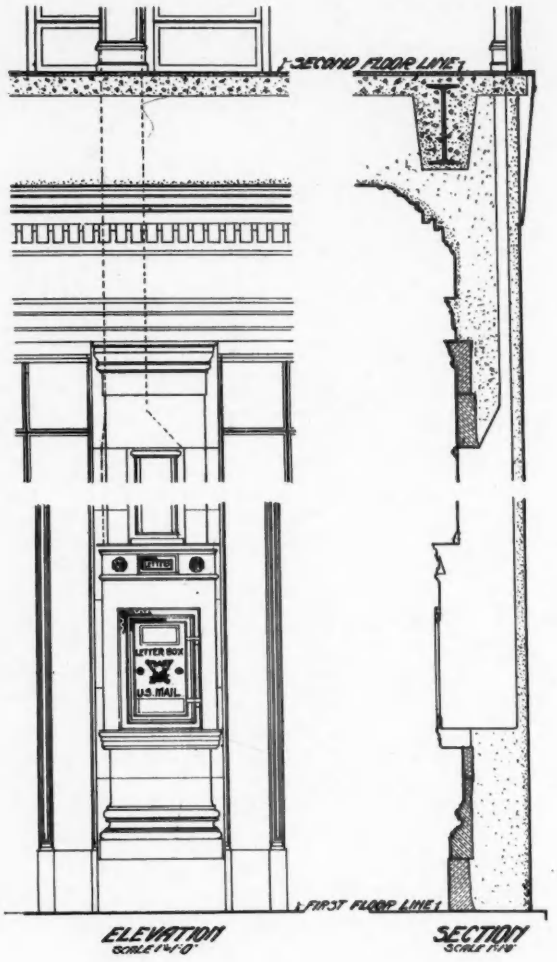


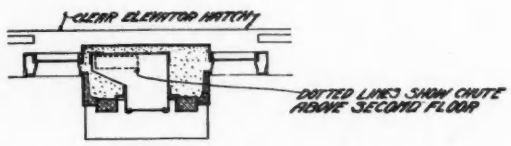
Main Entrance, Hobart Building, San Francisco
Willis Polk & Co., Architects, San Francisco

Photo, Gabriel Moulin



Detail of Upper Part of Tower, Hobart Building, San Francisco
Willis Polk & Co., Architects, San Francisco

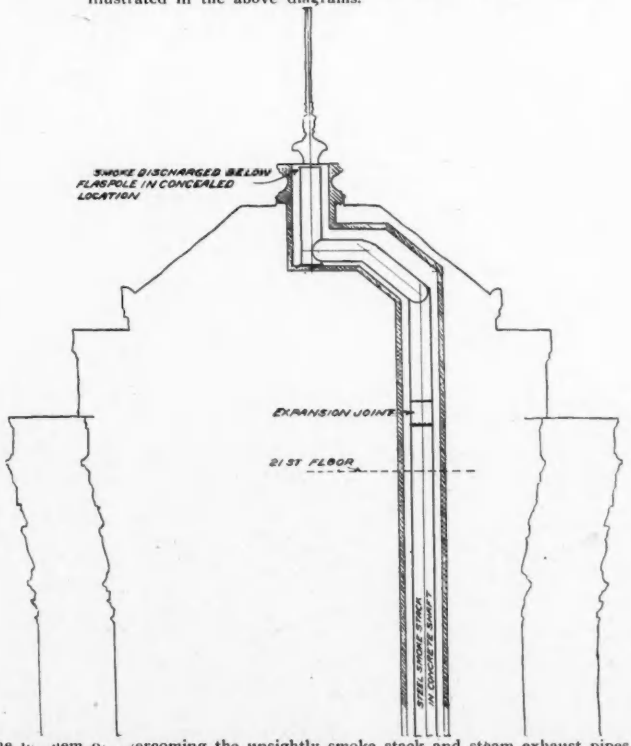




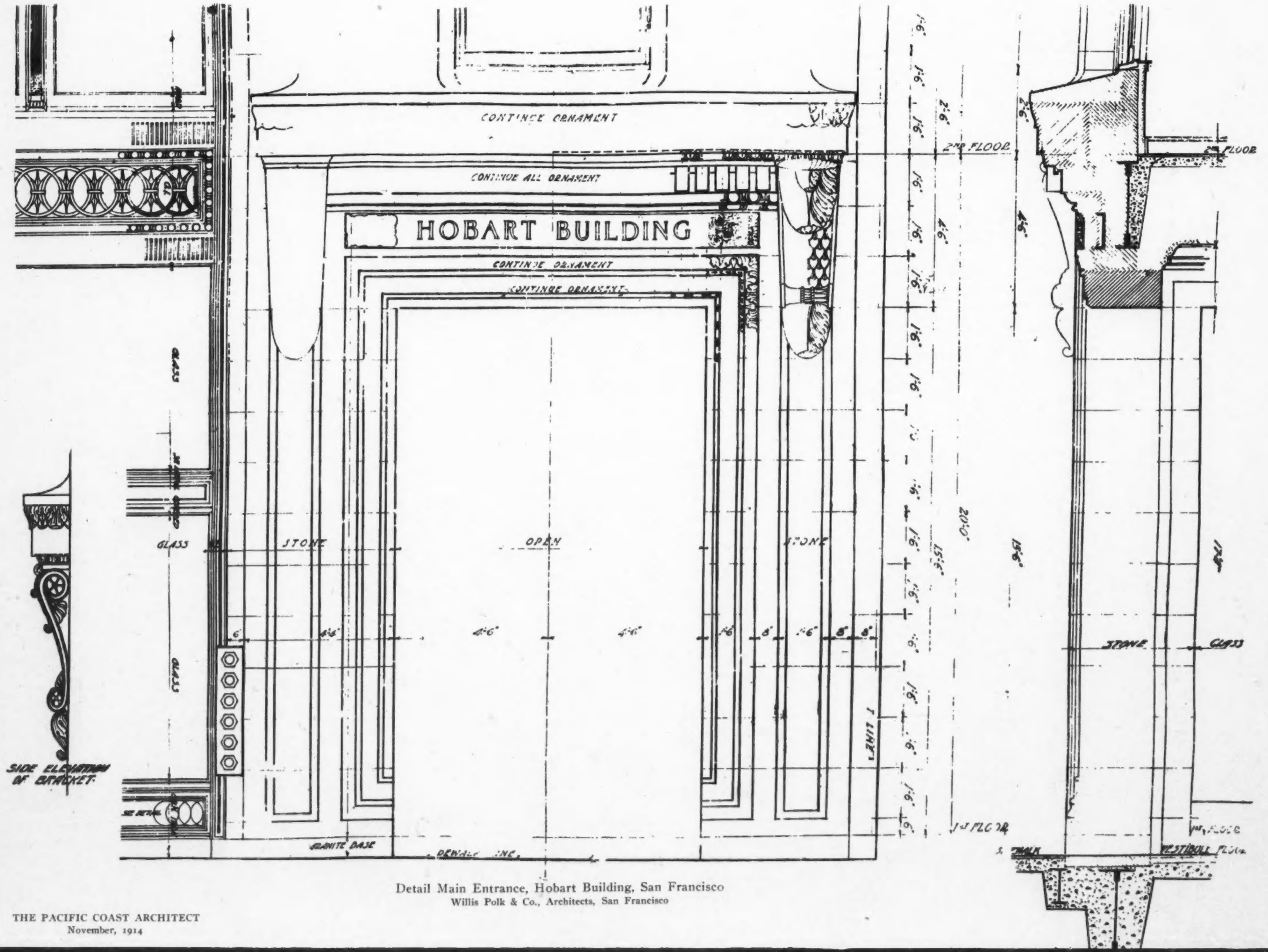
PLAN
SCALE 1"=1'0"

DETAILS OF MAIL CHUTE ON FIRST FLOOR HOBART BUILDING

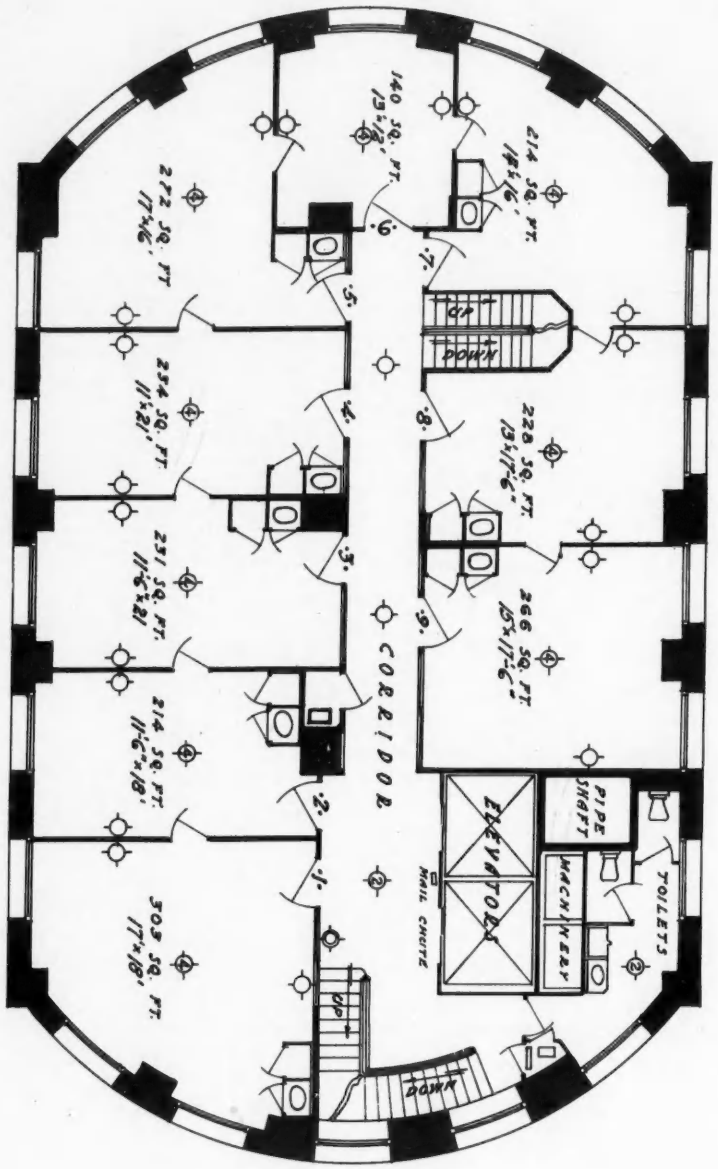
The regulations of the Postoffice Department often prove, on account of their inflexibility, an obstacle to the artistic installation of mail chutes. In the Hobart Building this was especially the case. Structural steel beams interfered with the location of the mail chute on an artistic axis in the vestibule. The problem was finally solved in the manner illustrated in the above diagrams.



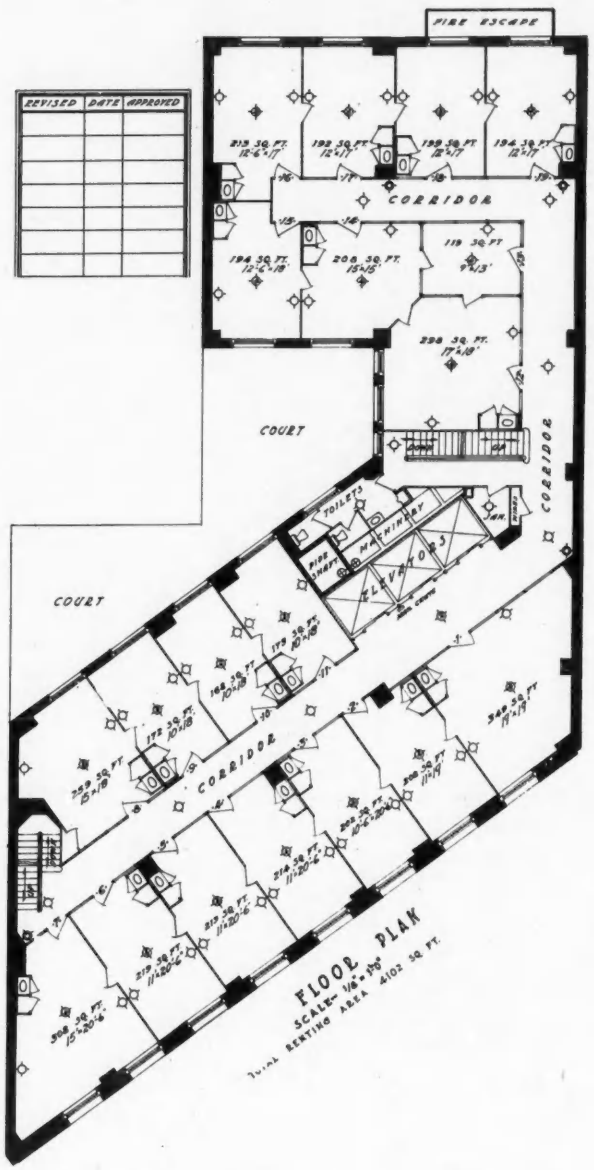
The problem of overcoming the unsightly smoke stack and steam exhaust pipes, which ordinarily disfigure the roofs of our tall buildings, was solved, as above illustrated, by the installation of an ornamental terra cotta finial at the center point of the roof just below and supporting the flagpole. Through the center of this the smoke stack and steam exhaust and ventilation from boiler room is discharged.



Detail Main Entrance, Hobart Building, San Francisco
Willis Polk & Co., Architects, San Francisco

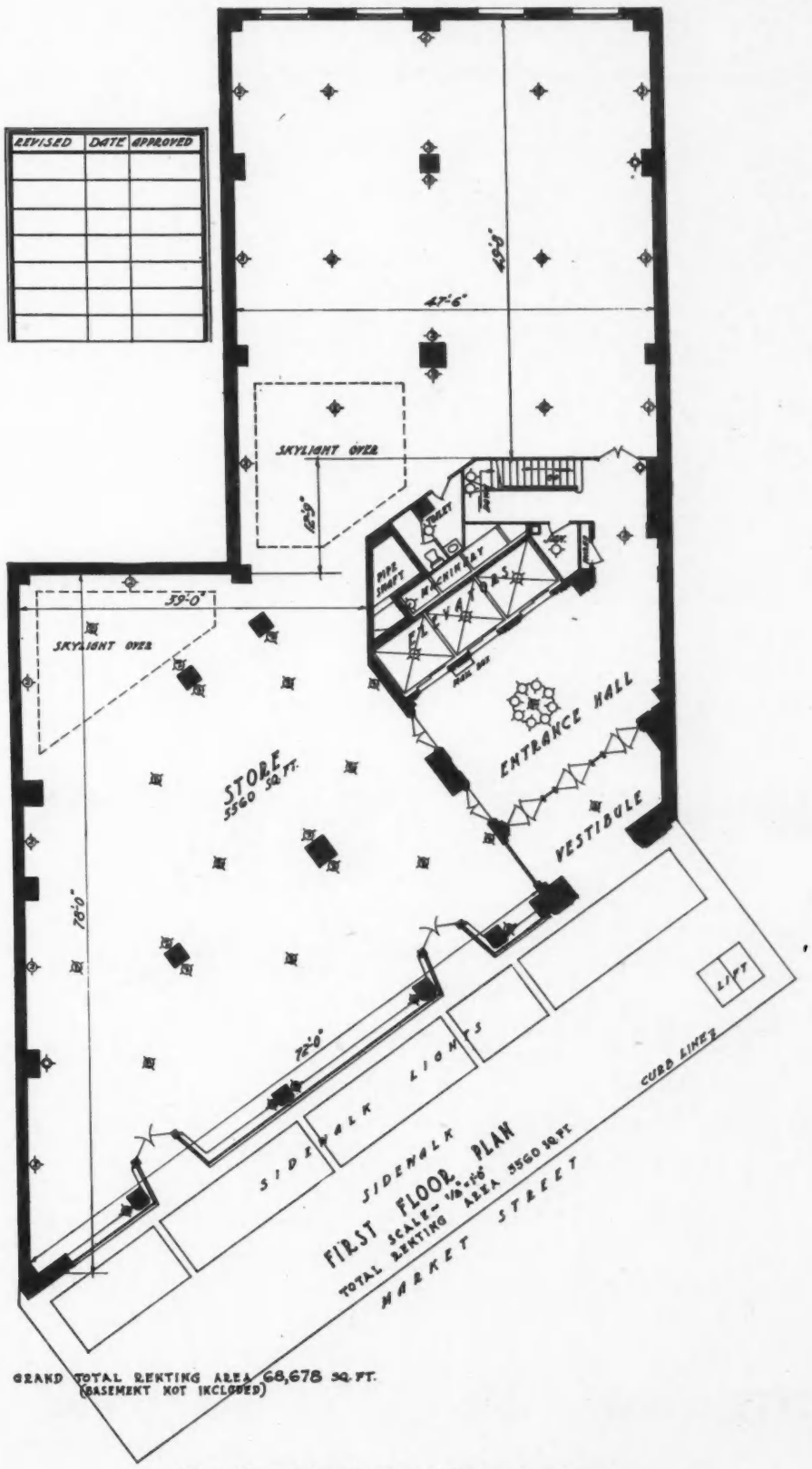


Typical Tower Floor Plan



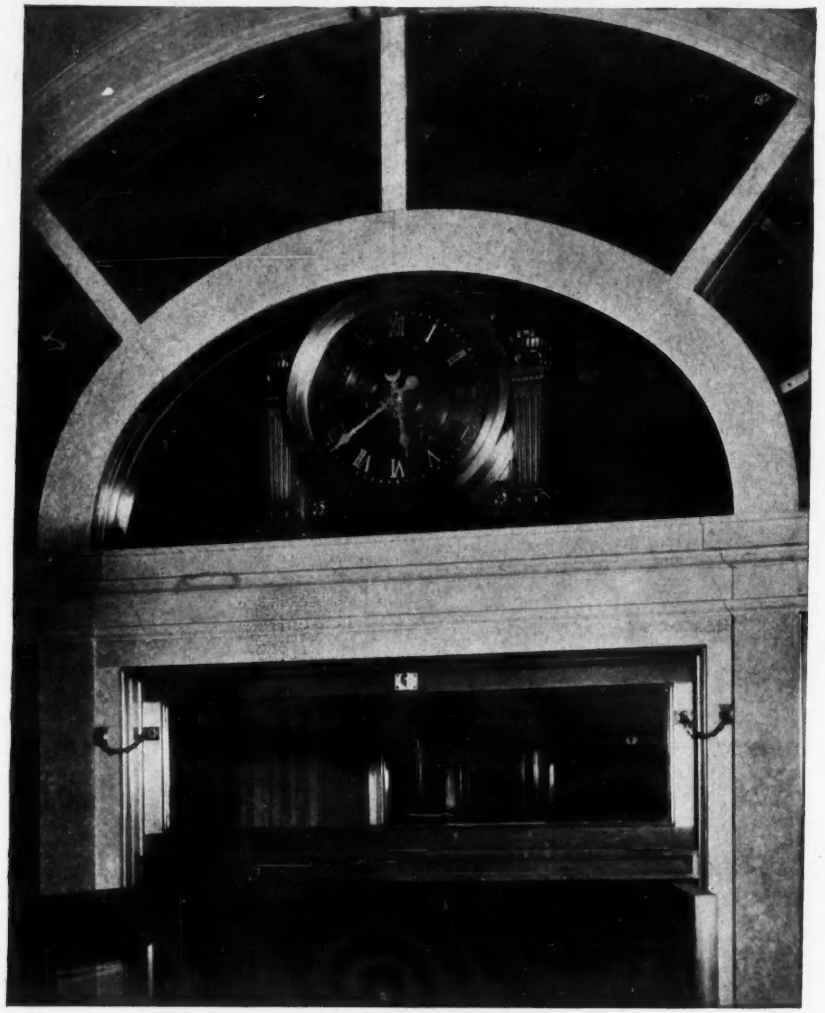
Typical Floor Plan—Second to Twelfth Floors

Hobart Building, San Francisco
Willis Polk & Co., Architects, San Francisco



First Floor Plan, Hobart Building, San Francisco
Willis Polk & Co., Architects, San Francisco

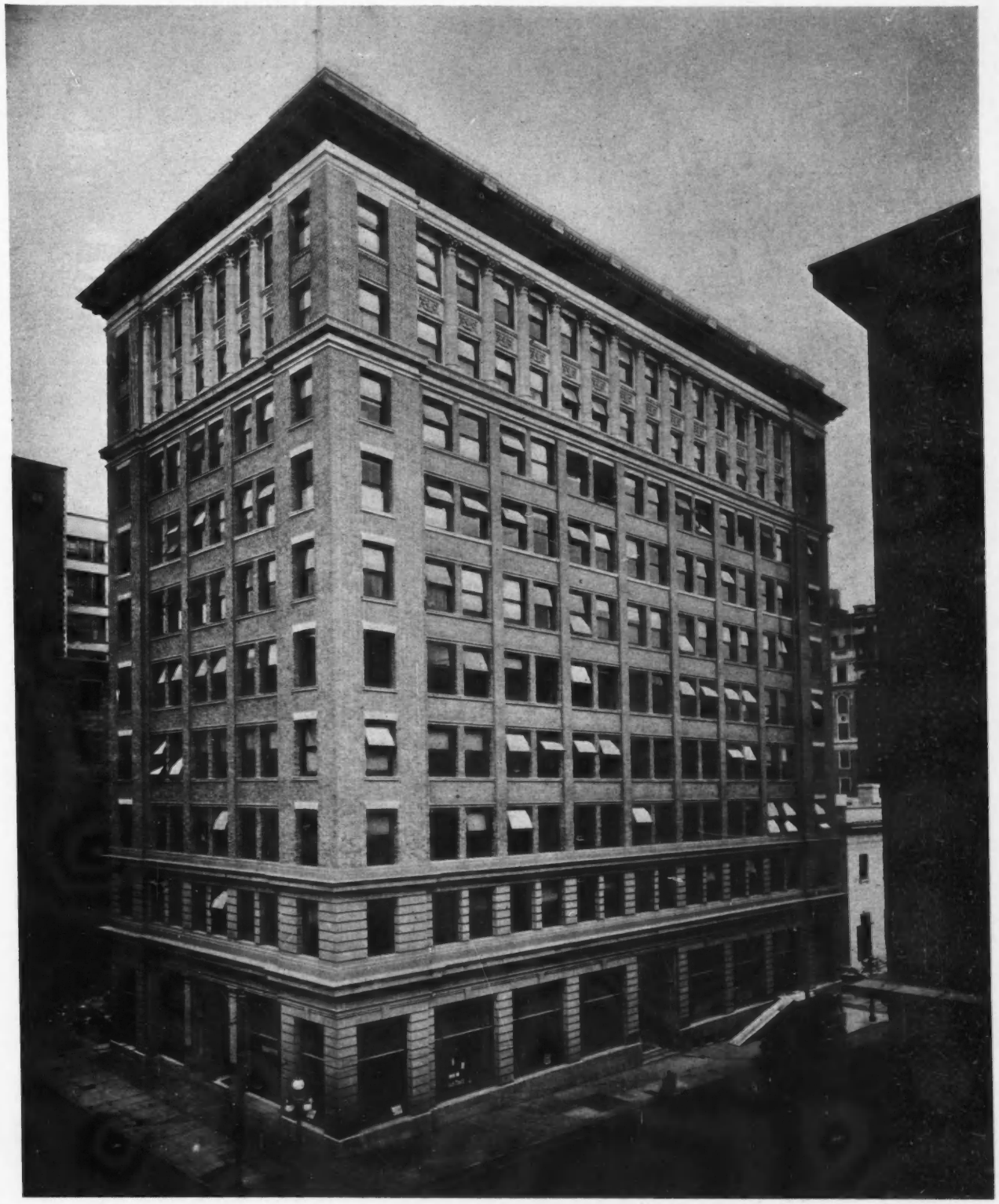
Screen in San Francisco Agencies Department



Electric Clock, Sansome Street Vestibule

Photo, Gabriel Moulin

Standard Oil Building, San Francisco
Benjamin Geer McDougall, Architect, San Francisco



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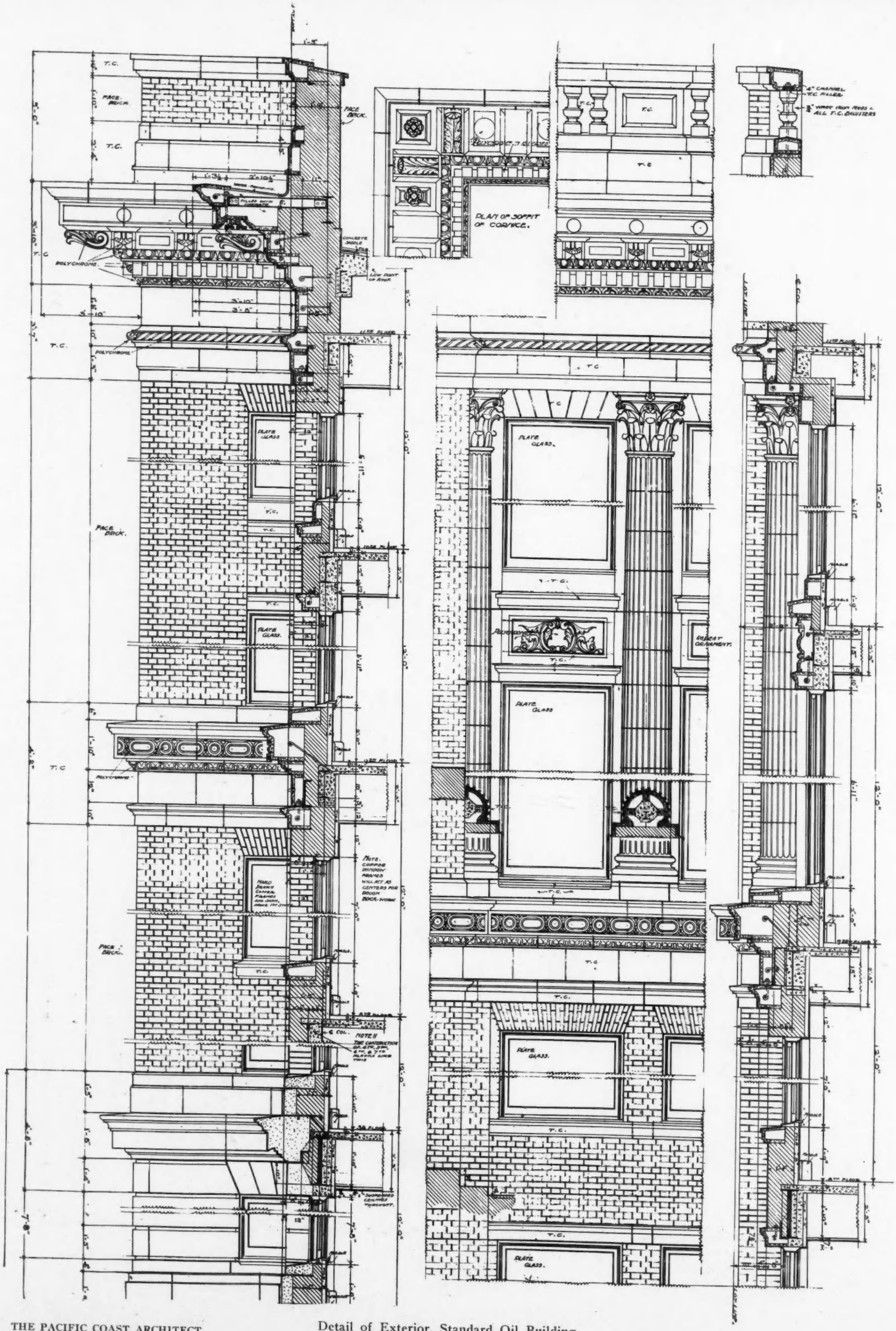


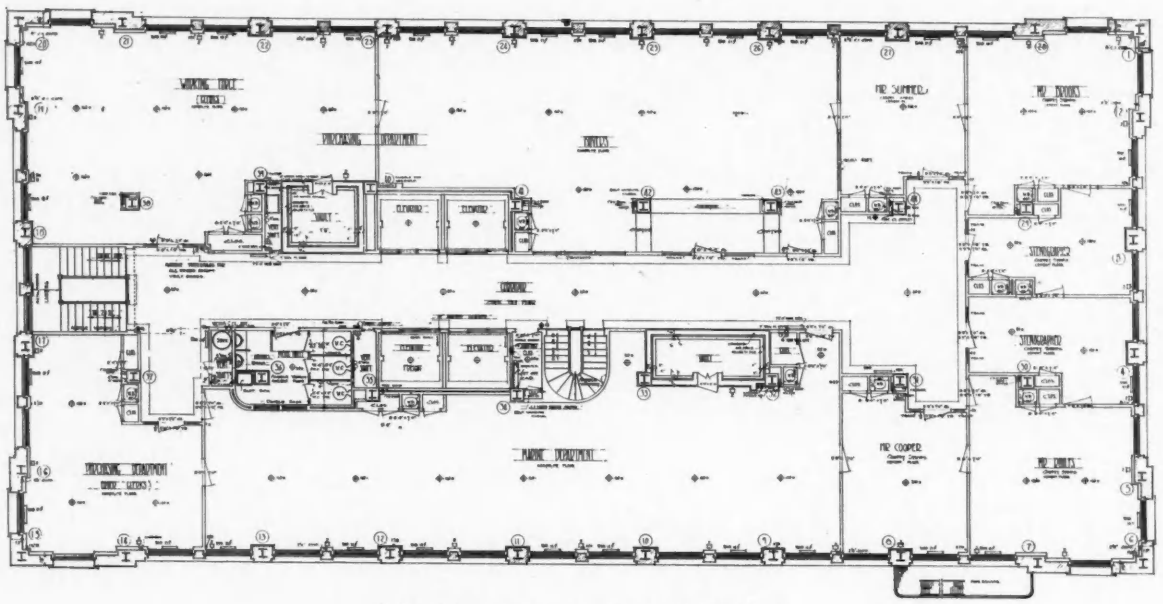
THE PACIFIC COAST ARCHITECT
November, 1914

Detail of Exterior, Standard Oil Building
Benjamin Geer McDougall, Architect, San Francisco

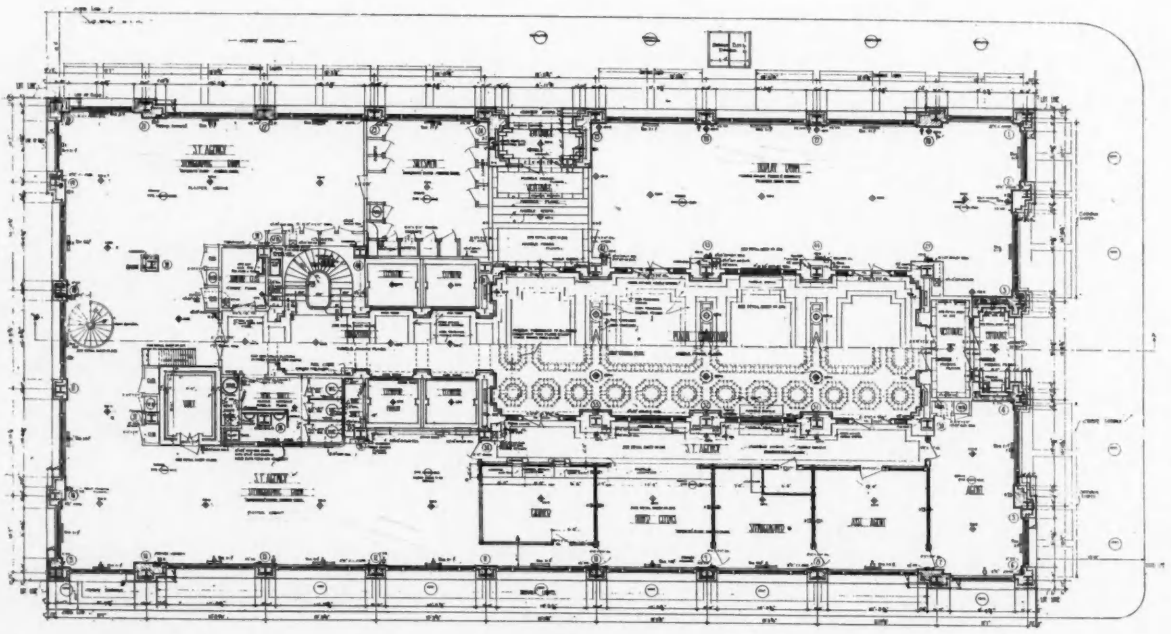
Detail of Upper Stories, Standard Oil Building

Main Lobby, Standard Oil Building
Benjamin Geer McDougall, Architect, San Francisco

Photo, Gabriel Moulin



Fifth Floor Plan, Standard Oil Building



First Floor Plan, Standard Oil Building

Benjamin Geer McDougall, Architect, San Francisco

The Development of Vertical Transportation

By R. J. HUNTINGTON*

The general public little realizes the immense amount of study that has been given to the problem of vertical transportation. When we consider the enormous number of people that are daily carried on passenger elevators in our large cities, and the very few fatal accidents that occur in connection therewith, the fact is forced upon us that the modern passenger elevator is by considerable the safest passenger conveyance in use today. This condition has been brought about by the most careful, painstaking experiment and study on the part of those elevator manufacturers who realize the responsibility involved in the manufacture and installation of this form of passenger carrier. The sky lines of our large cities indicate the evolution of the passenger elevator as nothing else does. It is needless to state that this development could never have been attained were it not for the perfection reached in the art of vertical transportation.

A few years ago the hydraulic elevator was the type most commonly in use in office buildings, and about twenty stories was the limit in height at this period. Three principal forms of hydraulic elevators were developed—i. e., the horizontal cylinder type, vertical cylinder type, and direct lift plunger type. The direct lift plunger elevator, one of the earliest hydraulic types, was brought into general prominence in this country by its introduction to the public through a well-known technical school in New England, and gained considerable popularity for a few years. While for comparatively low rises and moderate speeds it has given satisfaction, and was a form of construction that for a time appealed to many, it has now lost its popularity except for short rise, low speed work, and principally for freight service. The geared types of horizontal or vertical cylinder are still looked upon with favor by many engineers for buildings of moderate height and sufficient size to warrant the installation of a high pressure steam power plant.

In the early nineties, when electricity as a source of power began to come into general use, and a demand for electrically operated elevators had been created, the engineers and inventors with the leading manufacturers turned their attention to this new field. Success met their efforts, and during the next several years a rapidly increasing proportion of the elevators made were of the electric type. The early electric passenger elevators were all of the worm gear drum type. This type with different controls has been the standard electric elevator for several years. The controls commonly used are three, i. e., hand rope, car switch and push button. The hand rope is the simplest form of control, consisting of a flexible iron cable running through the car, connection being made to the elevator engine by the rope attached to the sheave on the machine. This sheave when turned by pulling on the hand rope in the car forms contact in the operating switches, starting the motor and causing the car to travel, the direction depending on which way the hand rope in the car has been moved. This type of elevator is used only for slow speeds, and almost entirely for freight elevators.

The car switch control is the standard form for electric passenger elevators, as it includes safety features not possible to obtain with the hand rope control, and is much easier to operate. The small lever switch in the car is connected to the controlling apparatus of the elevator engine by means of a flexible electric cable suspended from the bottom of the car, the other end of this cable being joined in the junction box at the center of the hoistway with the wiring from the controller. The car is started by the operator moving the handle of this lever switch either to the right or the left. This operating switch is so arranged that if the operator releases the handle while the car is moving, the switch lever will automatically return to the center, stopping the car. This is a safety feature of much importance. This car switch control worm gear drum type electric elevator is the one that has been commonly used for buildings of moderate height where high speed is not essential.

The push button control, commonly termed the automatic elevator, is quite popular on the Pacific Coast for use in apartment houses, private residences and other buildings where the service is such that the expense of an operator is hardly warranted. The push button control elevator is operated by a series of push buttons located in the car, and a push button side of the door at each landing. Many improvements and safety features have been added to the original push button control elevator, so that today this type of elevator is provided with all possible safeguards against carelessness. The best push button control elevators are so arranged that it is impossible to start the elevator car unless all the doors in the hoistway are tightly closed, and no hoistway door can be opened unless the car is opposite that particular door. The elevator car is also provided with collapsible gate electrically connected with the elevator control, so that this gate on the car must be closed before the car can be started. This is a safety feature of great importance. Another safety device is, that the elevator is so arranged that when the car reaches the landing to which it was sent, the door at that landing must be opened and closed before the car can be called away by pushing any of the buttons. The latest device in the way of a safety feature to be added to the push button control elevator is what is known as the magnet cam device. The door locks on the hoistway doors are released by a cam on the elevator car. The objection to this arrangement has been, however, that this cam on the car struck every lock up and down the hatchway in passing, and made it possible for someone standing in the hallway to open the door from the landing at the instant when the car was passing. This results not only in stopping the car, but in probable damage to the electric contacts by excessive arcing. This trouble is now taken care of by a magnet cam device, so arranged that when the car is sent to a certain floor the cam on the car is magnetically drawn back so that it does not engage any of the door locks until it reaches the floor to which it is sent. From the above it can be seen that about every possible emergency has been provided for in the way of safety devices.

The electric elevators above mentioned, are built for operation on both direct and alternating current circuits.

The drum type electric elevator is being rapidly superseded in public favor by the traction drive, which employs a driving sheave instead of a drum. This avoids fastening the cables to the driving mechanism (see description of gearless traction elevators for method of roping), and makes it possible for the car or counterweight to be forced into the overhead work through failure of the ordinary limit stops. This worm gear traction type is appropriate for passenger elevators of moderate speed and moderate rise, and for service elevators

*Pacific Coast Manager, Otis Elevator Co.

in hotels, department stores, etc., also for high class freight elevators.

The rapid increase in the height of the modern office building has demanded an elevator that has a practically unlimited car travel, and this demand has developed the gearless traction electric elevator. In this type of elevator, the working parts have been reduced to the simplest possible elements. The elevator engine consists of a motor, traction driving sheave and a brake pulley, the latter enclosed with a pair of powerful springs actuated electrically released brake shoes, all compactly grouped and mounted on a heavy iron bed plate. Instead of the high speed motor used with the geared electric elevators, a slow speed shunt wound motor, designed especially for this service, is used. The armature shaft, which is of high tensile steel, of unusually large diameter, is also the driving shaft, and on it are mounted the brake pulley and the traction driving sheave. The introduction of the direct drive, and the consequent doing away of all the intermediate gearing between the motor and the driven member results in a machine of remarkably high efficiency, and the use of the slow speed motor, together with the carefully designed controller, gives starting, accelerating, retarding and stopping features unequaled by any other type of elevator. The driving cables, from one end of which is supported the car, and at the other end the counterweight, pass partially around the traction driving sheave, continuing over or under an idler leading sheave, thence again around the driving sheave, forming a complete loop around these two sheaves, this arrangement resulting in the necessary tractive effort for lifting the car. One of the striking advantages resulting from this arrangement of cables, and the method of driving same, is the decrease in traction which follows the striking on the bottom of the hoistway of either the car or counterweight, and the consequent minimizing of the lifting power of the machine until normal conditions are resumed. Inasmuch as in any properly constructed elevator the parts are so arranged that the member (car or counterweight), which is at the bottom of the hoistway, must strike and come to rest before the other member can possibly come in contact with the overhead work, it will be readily seen that the above mentioned decrease in tractive effort is a very valuable and effective safety feature inherent in this type of elevator.

The controller is so designed in connection with the motor, that the initial retarding of the car in bringing the same to stop is independent of the brake, the latter being requisitioned to bring the car to final and positive stop, and to hold same at the landing. The motor is also so governed electrically as to prevent its attaining any excessive speed with the car on the down motion, no matter what the load in same may be. In designing the controlling equipment, one of the features demanding greatest consideration—in view of the very high speed at which the cars run—was the automatic retarding of their speed and the final stop of same automatically at the upper and lower terminals of travel. This result is very satisfactorily attained with the installation in the elevator hatchway of two groups of switches, located respectively at the top and bottom of the hatchway, each switch in the series being opened one after another as the car passes, each operation resulting in the reduction of speed until the opening of the final switch brings the car to a stop, applying the brake. This operation is entirely independent of the operator in the car, and is effective even though the car operating device be left in the full speed position. Failure of any one of these switches merely results in the stopping of the car, which cannot be run until the switch is put in commission again.

Another feature of security of the greatest interest and importance is provided in the oil cushion buffers. These are placed in the hoistway, one under the car and one under the counterweight, and are arranged to bring either the car or the counterweight to a positive stop through the telescoping of the buffer—this telescoping occurring at a carefully calculated rate of speed which is regulated by the escape of oil from one chamber of the buffer to another. The buffers have been proven capable by test of bringing a loaded car safely to rest from full speed, and in this respect are unique among elevator safety features of comparatively low cost.

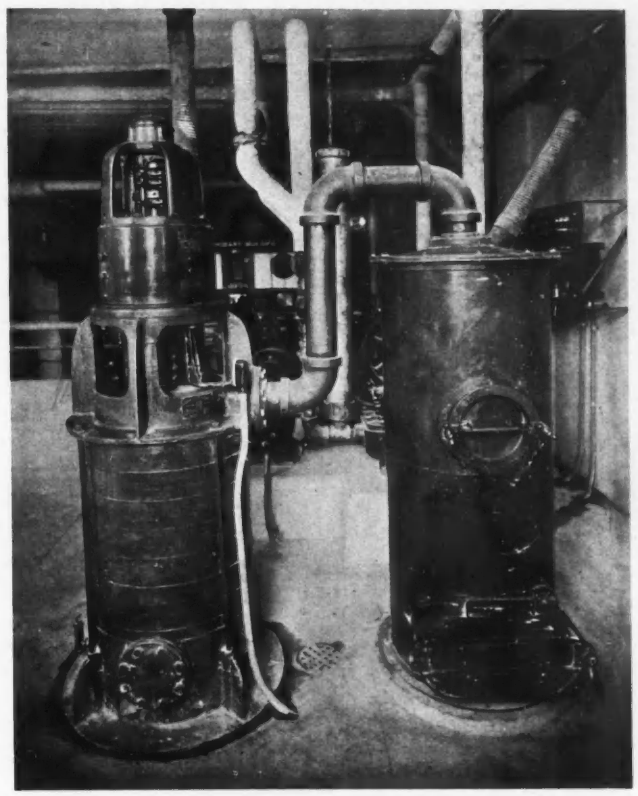
The usual safety devices installed in connection with the modern high grade apparatus are used with this type of elevator, including speed governors, wedge clamp safety devices for gripping the rails in case of the car attaining excessive speed, and potential switches. To the advantageous features already enumerated should be added the simplicity of installation and economy of space, resulting from the use of this machine, especially if the machine itself be located over the hoistway, and the refinements which have been worked out have resulted in an apparatus which in the existing installations has given immediate demonstration of its economy.

We have given a more detailed description of the gearless traction electric type, due to the fact that it is the most highly perfected elevator apparatus yet made, and forms the elevator equipment of the world's tallest business structures. A modification of this type is seen in the 2:1 roping gearless traction machine designed for car speeds up to 450 feet per minute, using a smaller, higher speed motor. The roping is arranged with sheaves on car and counterweight, so that these members travel at one-half the speed of the cables themselves. The gearless traction type of elevator for passenger service—either the 1:1 or the 2:1 roping, is unquestionably in a class by itself, and the rapidly increasing number of installations testifies to its extreme popularity among the leading architects, engineers and builders.

The Spencer Turbine Vacuum Cleaning System

The vacuum cleaner system installed in the Hobart Building consists of a turbine air exhauster and auxiliary dirt-receiving tank in the basement and the piping system which runs up through the building to the top. Inlet valves with spring covers, which automatically close when the hose is removed, are assembled in the piping system at each floor, so that the light and flexible vacuum cleaning hose can be quickly and easily attached to these inlet valves for cleaning purposes. The inlet valves are finished to match the hardware throughout the building.

The cleaning tools are constructed of pressed steel and aluminum, combining to the greatest extent lightness and serviceability. The carpet and bare floor renovators are twelve and fifteen inch size, equipped with exceptionally wide cleaning slots, easily handling not only dust but such other litter as is not easily picked up by hand. The wearing surfaces are cheaply and quickly renewable. They are equipped with the Spencer patent controllable swivel, which enables the operator to reach dirt in corners, under furniture, etc. The tool equipment



SPENCER TURBINE CLEANER PLANT INSTALLED IN THE HOBART BUILDING.

includes various types of brushes for use in cleaning walls, furniture, etc.

The heart of the system is the vertical turbine air pump, which is direct driven by an electric motor mounted on top of the turbine. The machine is extremely simple and durable in construction, and the moving element consists of a vertical steel shaft on which is mounted a series of steel impellers or fans, and there is a wide clearness between the moving and stationary elements which come in contact only at the ball bearings. In exhausting the air the end thrust of the moving element of the turbine is upward, and this is almost exactly counterbalanced by the weight, so that in reality there is practically no thrust or strain up, down or sideways, which makes a very simple and efficient arrangement.

The dust and dirt and litter, such as cigar and cigarette stumps, are sucked down through the piping system to the large auxiliary dirt-receiving tank, where this foreign matter is centrifugally separated from the air. The vitiated air is then carried completely out of the building through the smoke-stack, and the cleaning operation conforms to hygienic laws throughout.

Owing to the constant potential given by a turbine type of air exhauster, the vacuum is always maintained practically constant, whether only one or the full number of sweepers is in operation, and the power consumption is in proportion to the work being done. The advantage of this constant potential feature of the air turbine is that after designing and building a machine to give the proper vacuum so that the suction is strong enough to do thorough and rapid cleaning and not strong enough to injure carpets or rugs, this suction does not vary at the cleaning tool, whether one or more sweepers are in use.

Among the advantages of the Spencer machine are that it requires no wet separating tanks, no sewer connections and, being direct driven, it requires no belts, gears, or chains with their resultant noise and trouble. Neither does it require any mufflers, sight-feed oil cups, valves or valve seats.

The vacuum cleaning system in the Hobart Building was installed by Hughson & Merton, Inc., 530 Golden Gate Avenue, San Francisco, Pacific Coast Representatives for the Spencer Turbine Cleaner Company, of Hartford, Connecticut.

Semi-Indirect Lighting

By CHARLES T. PHILLIPS, C.E.*

While the title "Semi-Indirect Lighting" may not fit the system of lighting which will be described, it has been accepted as standard. The term "direct-indirect" is urged by many to be a more appropriate description, but while it may be correct it is not universally used.

This system of lighting usually consists of a lighting fixture where a portion of the light rays are directed on the plane to be illuminated, while the balance are directed against the ceiling for redirecting to the same plane.

The advantages of this system are that the efficiency is increased in some instances over the straight system of indirect lighting and at the same time the glare and sharp shadows of the direct method of lighting are avoided.

The numerous forms of bowls of translucent glass which are used for lighting are a form of semi-indirect lighting, but the efficiency is usually low and for commercial purposes, where economy in correct consumption is an important factor, these bowls have not proven a success.

The fixture shown in this article has been designed to overcome the objections to the plain bowl and consists

*Consulting Engineer, Pacific Building, San Francisco.

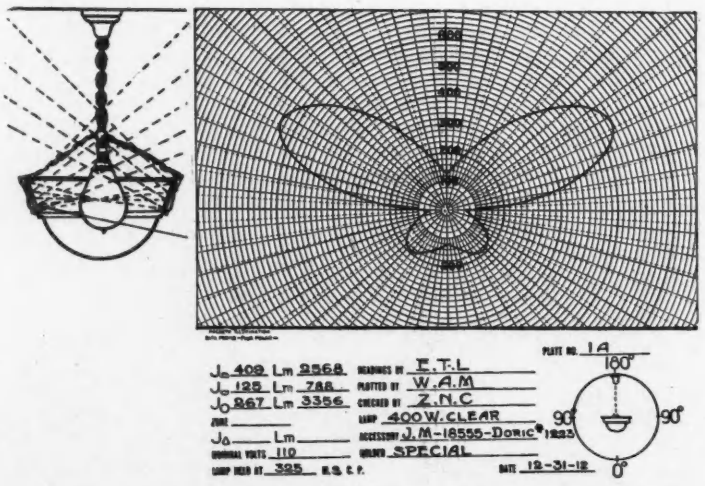
VIEW DOWN THE AISLE IN THE EMPORIUM.

NIGHT VIEW INTERIOR OF THE EMPORIUM.

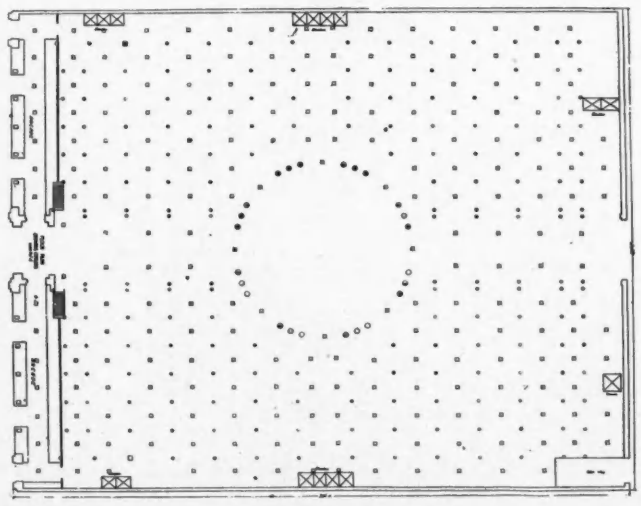
of a spun or cast metal flange containing corrugated mirror reflectors and a translucent bowl. Sufficient light is forced thru the translucent bowl at the bottom to give a soft, evenly diffused light, and by revealing the light source, a cheerful appearance is given without an objectionable glare. Sufficient shadow is obtained to bring out the details of objects in the room without sharp contrast. Eye strain is thus avoided and the resultant illumination is most pleasing.

The accompanying cut is made from a photograph of an installation of this type of lighting in one of the largest department stores on the Pacific Coast. It is perhaps one of the largest single areas of store space in the country and the goods displayed are most diversified in character and display.

This type of lighting, combined with the nitrogen filled incandescent tungsten lamp, gives perhaps the nearest approach to daylight of any commercial system of light-



Flux polar diagram showing distribution of light above Frink direct-indirect reflecting electrolier, using 400-watt evacuated Mazda lamp, and diagram showing arrangement of mirror reflector in fixture.



Floor plan of The Emporium, showing arrangements of electric outlets. Floor space 350 feet by 275 feet 4 inches. Fixtures spaced 16 inches by 24 inches centers. 400-watt lamps used at each outlet.

ing. This, of course, depends to a great extent upon the color of the ceiling and side walls. For daylight value and high efficiency the side walls and ceiling should be white, as any tints in the reflecting surface will affect the spectrum of the reflected light and thus give an entirely different color value to the objects displayed to that obtained by daylight. In stores where it is necessary to match colors under artificial light, the importance of considering the selection of the lighting unit for this purpose cannot be over-estimated.

Where the ceiling and side walls are tinted in medium or dark tones, the efficiency of this system of lighting falls rapidly and the reflected light partakes of the color of the walls and ceiling.

The accompanying photometric curve of the fixture with a 400-watt Mazda lamp shows the proportion of the light rays directed to the ceiling and those that are forced through the translucent glass bowl and fall directly upon the illuminating plane.

In designing a system of illumination of this type, care should be used in locating the outlets, and the height at which the fixtures are hung should be given careful consideration, otherwise, the best results will not be obtained, and the high efficiency and uniform lighting that is possible will be lost.

INDUSTRIAL INFORMATION

All terra cotta work on the new Hobart Building was manufactured by Gladding, McBean & Co., with offices in the Crocker Building, San Francisco.

The association between Architects W. C. Pennell and John C. Austin, Los Angeles, has been severed. Mr. Austin's address is 1121-1125 Baker-Detwiler Building, Los Angeles.

Frederick H. Eley, architect, Santa Ana, Cal., has become associated with Architect John B. Hawley of that city. They will be known as Eley & Hawley, architects, with offices in the Register Building.

Mangrum & Otter, 561 Mission Street, San Francisco, installed the boilers and generating plant and all heating and ventilating apparatus in the new Hobart Building. The company also received and executed the contract for the installation of tile floors.

The exterior and interior marble in the Hobart Building was installed by Joseph Musto Sons-Keenan Company, importers and dealers in marble. This company operates extensive marble mills in Los Angeles, at 1949 Santa Fe Avenue, and in San Francisco, at 535-565 North Point Street. The marble work in the Hobart Building is one of the finest jobs on the coast.

R. Brandlein & Co., 3155 Eighteenth Street, San Francisco, continues to receive praise for the general excellency of their work in connection with the installation of the seating in the recently completed St. Ignatius Church, San Francisco. This job has been pronounced perfect in every respect by authoritative experts.

R. Brandlein & Co. is one of the foremost firms of its particular kind on the Pacific Coast, having the necessary equipment and every facility for executing promptly and correctly work of any description in the following lines: Residential interiors, special furniture, lobbies and vestibules, church work, mill work, bank equipment, bar fixtures, store fixtures, office fixtures and postoffice equipment.

Joseph Musto Sons-Keenan Company, San Francisco, has secured the contract for the interior marble work in the new San Francisco City Hall, the contract price being $235,000. This is the largest contract for marble work ever let on the Pacific Coast. This company has just completed both the exterior and interior marble for the new Hobart Building, the Oakland City Hall and the St. Ignatius Church, San Francisco. They are also installing the marble in the new Oakland Auditorium and the Citizens Bank Building, Los Angeles.

Foreseeing the increasing popularity of wax as a wood finish, and the consequent demand for an absolutely reliable article, Berry Bros., have placed on the market a floor and interior trim wax which maintains the same high standard that has always been enjoyed with all Berry Bros.' products. Berry Bros.' floor wax is said to be the lightest colored wax on the market. On account of its hard drying qualities, it does not collect dust or dirt, nor does it mar easily. Berry wax takes very little labor to keep the finish up.

The clocks and clock system in the new Hobart Building were installed by the Decker Electrical Construction Company, 111 New Montgomery Street, San Francisco, representatives of the Self Winding Clock Company, New York. A handsome marble dial clock was used in the main entrance. It has bronze Roman numerals. All clocks in the Hobart Building are regulated every hour by the Western Union Telegraph Company's time signal of correction, as furnished every twenty-four hours by the Lick Observatory.

The Decker Electrical Construction Company also installed the clocks and clock system in the Standard Oil Company Building, San Francisco. This system is what is known as the synchronizing clock system, each clock having movements of its own, which are corrected every hour by a master clock in the event of any variation. The clock system in this building has given absolute satisfaction. The variation in time during the past year has been less than six seconds.

The clock in this building is superior to the ordinary jumper system, inasmuch if anything happens on the line to any individual clock, the other clocks of the building are not affected by it. This system is being used by practically all of the big Eastern railroads.

The Decker Electrical Construction Company has also had considerable success with its Universal Minute Interval Program Instrument. This instrument, as its name implies, is universal in the fullest sense of the word's meaning. It can be furnished to fill practically any and all requirements in the way of ringing program bells. A schedule of the most complex combination can be rung with the use of one of these instruments. It is a thoroughly up-to-date mechanism designed to operate with the least possible consumption of power. It is entirely automatic and is not liable to get out of order.

Francis W. Grant, architect, has moved from 332 Globe Block, Seattle, to the Mehlhorn Building.

Architect Ira A. Worsfold has moved from Corvallis, Ore., and is now located at Palms, Cal.

Rudgear-Merle Company, Bay and Stockton Streets, San Francisco, installed all ornamental iron work in the new Hobart Building.

Goichi Takeda, Japanese architect, has arrived in San Francisco to complete arrangements for the arrival of materials for the construction of the Japanese pavilion at the Panama-Pacific International Exposition.

Architect I. E. Frary, formerly of Los Angeles, has opened offices in Calexico. Frary has submitted a new building ordinance to the local officials, which it is expected will be put into operation in that community.

The Forderer Cornice Works installed the roofing and metal windows for the Hobart Building. The metal windows were manufactured at the San Francisco plant of the company.

The Clinton Fireproofing Company, Mutual Savings Bank Building, San Francisco, executed the contract for concrete fireproofing for the Hobart Building. This concern worked in perfect accord with the architect, who has given it considerable praise for the general excellency of the fireproofing work.

The Otis Elevator Company installed three Otis ball bearing electric 1-1 traction passenger elevators and one hydraulic plunger sidewalk lift, in the Hobart Building, San Francisco. The ball bearing 1-1 elevator is the latest type of elevator equipment known to the manufacturers of elevators.

Architect Thomas F. Imbs of the architectural firm of Comes & Imbs, St. Louis and Pittsburgh, architects for the new church edifice to be erected for St. Vincent's Parish, corner Adams and Figueroa Streets, Los Angeles, has arrived in that city to consult with the owners concerning the new building. Imbs plans to establish a branch office of his firm in Los Angeles.

Farrell & Reed, contractors, Third and Mission Streets, San Francisco, laid the brick for the Hobart Building, and this firm has since been given credit for doing a very excellent piece of work in this connection. It might not be amiss to mention here that the firm of Farrell & Reed has been doing business in San Francisco for the past twenty-seven years, during which time their contracts have included a large number of the biggest structures in San Francisco and vicinity.

Word still drifts into this office of the most enjoyable time participated in by Southern California architects, who last month were the guests of Architect Octavius Morgan of Los Angeles, at his beautiful country estate, "Valla Vista," near Glendora. The occasion commemorated the twentieth anniversary of the Engineers' and Architects' Association of Southern California.

The fourth annual convention of the Architectural League of the Pacific Coast was held in Seattle on October 15th, 16th and 17th. The gathering was opened with addresses by Mr. Ellis E. Lawrence, former president, and Mr. Oliver LaFarge.

Interesting papers were presented by Mr. Folger Johnston on "Relation of Style to Architecture," and by Mr. Hault Horton on "Tendencies in English Architectural Design of Today." These were followed by discussions by Professor Perry, Mr. John Bakewell, Jr., and Mr. W. B. Faville.

During the time of convention the members were entertained quite extensively by Seattle architects. This feature of the gathering was in charge of C. H. Bebb.

The Pacific Manufacturing Company, 177 Stevenson Street, San Francisco, installed all wood finish on the Hobart Building. Siberian oak was used throughout the building with the exception of a special apartment on the seventeenth floor, which was finished in mahogany, and in rooms on the eighteenth floor, occupied by the Pacific Lumber Company, where redwood was used, this being a product of this concern. Circassian walnut, inlaid with mother of pearl, was used on the elevator cars. The woodwork in this building is truly a beautiful piece of work.

Charles Marshall, traveling representative of the Sandusky Portland Cement Company, Sandusky, Ohio, recently arrived in San Francisco, on a tour of Pacific Coast territory. Before returning East Mr. Marshall will visit the principal towns and cities on the coast in the interest of his company. He advises us of the arrival of a shipment of Medusa White Portland cement, delivered to the Building Material Company, Inc., 583 Monadnock Building, San Francisco. This shipment came through the Panama Canal, it being the first shipment of cement to be so routed.

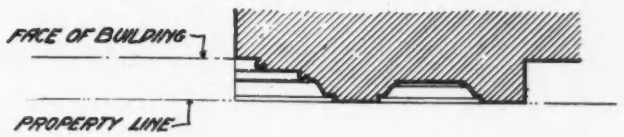
The S. T. Johnson Company, 1337 Mission Street, San Francisco, recently commenced the installation of a high-pressure boiler equipment and a complete oil-burning equipment for heating the naval hospital at the Mare Island Navy Yard. The equipment includes three seventy-horsepower return tubular boilers set in one battery. The contract was awarded the S. T. Johnson Company because this concern was in a position to make the installation in less time than any competing company, it being the idea of the naval officials to have the work entirely completed before the winter season sets in. The work will be completed on November 7th.

The California Plate and Window Glass Company, 864 Mission Street, San Francisco, installed all plate and window glass in the Hobart Building. This company received the contract on January 26th, of this year, at which time it was advised to be ready to install the glass on the first of July. On that date they were advised by the architect that the sashes were ready for the glass, which in itself is but another indication of the thorough efficiency and perfection of all the plans and arrangements for the building of the big structure, and the company immediately commenced installation. At this writing the job of installing glass is practically complete with the exception of placing the windows in the ground floor stores.

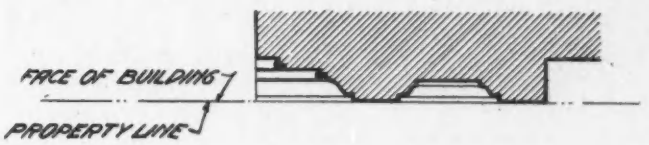
Wittman, Lyman & Co., plumbers, 341-45 Minna Street, installed all plumbing in the Hobart Building, which job was one of the largest plumbing contracts ever let on the Pacific Coast. An amusing spectacle occurred during the installation of the stand pipes, when the fire department officials visited the Hobart job for the purpose of testing the water pressure. Nozzles were attached to the outlets on the roof, which, by the way, are the highest in San Francisco, and the water turned on. About one hundred feet from the building the stream turned into a spray which scattered itself as far as Battery Street and for two blocks down that street. This spray had every appearance and also the effect of a regular rainfall, and hundreds of persons walking on the streets could be seen with their umbrellas up and open to protect them from the water. This water test was satisfactory in every manner.

The Wittman, Lyman & Co. handled the entire job in the most satisfactory manner without any friction whatever with the architect, and finished the work on time with the building.

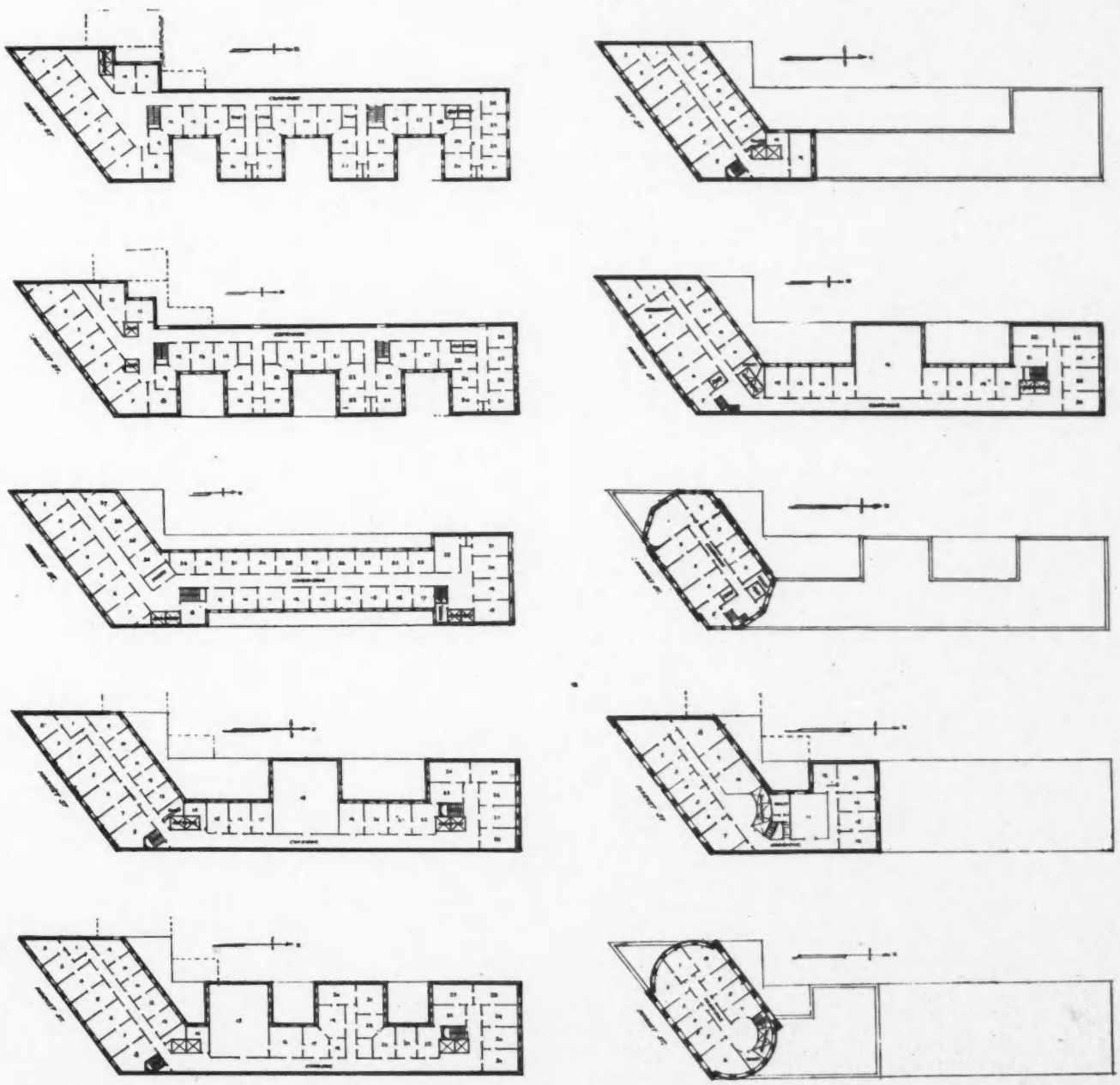
The Chronology of an Office Building



Usual method used, to conform to city and county requirements, which do not permit architraves to project beyond property line, which method necessitates placing face of building back from property line.



Unique method resorted to in Hobart Building, which secures successful architectural treatment without placing face of building back from property line with consequent loss of rentable area.



The above are typical examples of many studies of the general plan. It will be noticed that the entrance and elevators, the controlling elements, were placed at many points, and that these studies finally led to locating them at the easterly line of the lot. In this connection, it is interesting to note that the exact location of the elevators was only determined upon after it was decided that a tower plan of 21 stories on the Market Street end of the lot would prove superior, from an investment point of view, to a 12-story building covering the entire lot, which extends through to Sutter Street. Also it was seen that an entrance at the easterly lot line would permit of a corridor extending through to Sutter Street, should it be decided to improve the Sutter Street end of the property. Elasticity in plan was also sought, that is, the entrance and elevators were located so that at any future time, the building could be extended to the east of the present property, or an entrance from Montgomery Street could be introduced.

THE PACIFIC COAST ARCHITECT is the official organ of the San Francisco Chapter of the American Institute of Architects.

San Francisco, Chapter, 1881—President, William B. Faville, Balboa Building, San Francisco, Cal. Secretary, Sylvain Schnaittacher, First National Bank Building, San Francisco, Cal.
Chairman of Committee on Public Information, William Mooser, Nevada Bank Building
Chairman of Committee on Competition, Geo. B. McDougall, 235 Montgomery St.
Date of Meetings, third Thursday of every month; annual, October.

OTHER PACIFIC COAST CHAPTERS OF THE AMERICAN INSTITUTE OF ARCHITECTS.

Southern California Chapter, 1894—President, A. C. Martin, 430 Higgins Bldg., Los Angeles, Cal. Secretary, Fernand Parmentier, Byrne Building, Los Angeles, Cal.
Chairman of Committee on Information, W. C. Pennell, Wright & Callender Bldg., Los Angeles.
Date of meetings, second Tuesday (except July and August), (Los Angeles).

Oregon Chapter, 1911—President, Morris H. Whitehouse, Wilcox Building, Portland, Ore.
Secretary, Ellis F. Lawrence, Chamber of Commerce Building, Portland, Ore.
Chairman of Committee on Public Information, Ellis F. Lawrence.
Date of Meetings, third Thursday of every month, (Portland); annual, October.

Washington State Chapter, 1894—President, James Stephen, 726 New York Block, Seattle, Wash. Secretary, Arthur L. Loveless, 513 Colman Building, Seattle.
Chairman of Committee on Public Information, Chas. H. Alden, 513 Colman Bldg., Seattle (till further notice send all communications to Arthur L. Loveless, 513 Colman Building, Seattle).
Date of Meetings, first Wednesday (except July, August and September), (at Seattle except one in spring at Tacoma); annual, November.

Colorado Chapter, 1892—President, George H. Williamson, 528 Majestic Bldg., Denver, Colo. Secretary, Arthur A. Fisher, 459 Railway Exchange Building, Denver, Colo.
Chairman of Committee on Public Information, Arthur A. Fisher, 459 Railway Exchange Bldg., Denver, Colo.
Date of Meetings, first Monday of every month (Denver, Colo.); annual, September.

SAN FRANCISCO CHAPTER, A. I. A.

The Annual Meeting of the San Francisco Chapter of the American Institute of Architects was held at the Tait-Zinkand Cafe on Wednesday evening, October 21, 1914.

After dinner the meeting was called to order by the President, Mr. George B. McDougall, at 8:25.

The Minutes of the regular meeting, held September 17, 1914, were read and approved.

STANDING COMMITTEES.

Board of Directors—The Secretary on behalf of the Board of Directors, read and submitted its Annual Report, which was ordered received and placed on file.

Sub-Committee on Competitions—Mr. Mooser, for this Committee, made a verbal report, which was intended to be written and which was ordered received.

Sub-Committee on Public Information—Mr. Mooser, for this Committee, made a verbal report, which was intended to be written, and which was ordered received.

Legislative Committee—Mr. Mathews, for this Committee, made a verbal report, stating that as there had been no meeting of the Legislature during the past year, there was nothing to report. Preparations were being made for the introduction of legislation at the next session of the State Legislature.

Building Laws Committee—A written report was received from this Committee and was read by the Secretary and ordered received and placed on file.

Educational Committee on Practice—A written report was received from this Committee and was read by the Secretary and ordered received and placed on file.

Architectural League and Education—A written report was received from this Committee and was read by the Secretary and ordered received and placed on file.

Quantity Surveying Committee—Mr. Wright, for this Committee, submitted a written report, which was read and ordered received and placed on file.

Committee on Relations with the State Board of Architecture—A written report was read by the Secretary, which was ordered received and placed on file.

SPECIAL COMMITTEES.

Committee to Gather Data Concerning the Matters Contained in Mr. Welsh's Report—Mr. Wright, for this Committee, stated that as there had been no meeting of this Committee, there was nothing to report.

REPORT OF OFFICERS.

The Secretary read the annual report of the Board of Directors and the report of the Secretary and Treasurer, both of which were ordered received and placed on file. The President read his annual address, which was ordered received and placed on file.

On motion duly made, seconded and carried, the Officers and Committees were tendered the thanks of the Chapter for their services during the past term, and the Secretary was directed to have the annual reports printed in accordance with the usual custom.

ELECTION OF OFFICERS.

The next order of business was the election of officers for the ensuing year.

There being no other nomination, the Secretary was directed to cast a ballot for Mr. William B. Faville for the office of President. Mr. Faville was thereupon declared duly elected President for the ensuing year.

There being no other nomination and Mr. Bakewell having declined to run as Vice-President, there was no action on this office by the Chapter.

There being no other nomination, on motion duly made, seconded and carried, the President cast a ballot for Mr. Sylvain Schnaittacher for Secretary and Treasurer and Mr. Sylvain Schnaittacher was thereupon declared duly elected Secretary and Treasurer for the ensuing year.

Mr. Day having declined, on motion duly made, seconded and carried, the Secretary was directed to cast a ballot for Mr. Henry A. Schulze and Mr. James W. Reid, the only other nominees for Trustees, whereupon Messrs. Schulze and Reid were declared duly elected to serve the Chapter as Trustees during the ensuing year.

After his election, Mr. Faville assumed the Chair and addressed the Chapter.

ELECTION OF DELEGATES.

Mr. Faville, President, and Mr. Schnaittacher, Secretary, being ex-officio delegates to the next Annual A. I. A. Convention, Messrs. Mooser and Schulze were nominated and elected in addition.

Further, on nomination duly made, seconded and carried, the Board of Directors were empowered to select suitable proxies or alternates to fill any or all vacancies.

It was duly moved, seconded and carried that the Chapter pay for the transportation expenses of the delegates to the Convention at Washington.

In the matter of the nomination for Fellowship, Messrs. Faville, Schulze and Mooser were, on motion duly made, seconded and carried, recommended to the Institute for this honor, and the Board of Directors were further directed to select other eligible names to be transmitted to the Institute.

COMMUNICATIONS.

The following communications were received and ordered placed on file:

Communications from Senators George C. Perkins and John D. Works relative to House Bill S6059 in the matter of the building for the Department of Justice at Washington, D. C.; two communications from E. C. Kemper in connection with nomination for Fellowship and one relating to the Lincoln Highway Association; communications from Willis C. Lowe and Leon H. Smith requesting their resignation from the Chapter; from C. H. Whitaker relative to exhibit at the Panama-Pacific Exposition; from Clinton Day regarding his nomination as Trustee; from John Bakewell regarding his nomination to the Vice-Presidency, and from Lloyd Warren, Chairman of the French Artists Relief Committee appealing for subscriptions to said Committee.

MEMBERSHIP.

Mr. Leon H. Smith having submitted his resignation to the Chapter owing to his practicing in the East, on motion duly made, seconded and carried, the same was accepted.

Mr. Willis C. Lowe having submitted his resignation, action was postponed for thirty days with the view of having the Secretary communicate with Mr. Lowe to reconsider the matter.

NEW BUSINESS.

Mr. C. H. Whitaker, the editor of the *Journal of the American Institute of Architects,* gave an illuminating address on the purpose of the Journal and its relation to the Institute, the public and the architectural profession in general. At the conclusion of Mr. Whitaker's remarks, he was voted the thanks of the Chapter.

The attention of the Chapter was called to the omission of the name of the architect from the monument in Golden Gate Park, known as the "Portals of the Past." On motion duly made, seconded and carried, the matter of calling the attention of the authorities to this omission was left in the hands of the Board of Directors.

In the matter of the Institute reorganization, the delegates to the convention were instructed that it was the sense of this Chapter that it favored the reorganization plan relating to the Chapters proposed by the Institute; also an enlarged Judiciary Committee by the addition of sub-committees.

In the matter of the Competition Code, the delegates were instructed to bring to the attention of the Institute the omission of proper mention of open competition and also the omission of the matter relating to the professional adviser contained in the previous code.

ADJOURNMENT.

There being no further business before the Chapter, the meeting adjourned at eleven o'clock.

Subject to approval. SYLVAIN SCHNAITTACHER,
Secretary.

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SOUTHERN CALIFORNIA, A. I. A.

MINUTES OF THE 75TH MEETING OF MEMBERS. REGULAR EIGHTH ANNUAL MEETING.

The eighth annual meeting of the Southern California Chapter of the American Institute of Architects was held at the Hollenbeck Cafe, Los Angeles, California, on Tuesday, October 13, 1914.

The meeting was called to order at 8:15 p. m. by Vice-President A. C. Martin.

The following members were present:

1. D. C. Allison
2. J. E. Allison
3. John C. Austin
4. J. J. Backus
5. A. B. Benton
6. J. J. Blick
7. Theo. A. Eisen
8. P. A. Eisen
9. H. W. Glidden
10. Elmer Grey
11. J. C. Hillman
12. F. D. Hudson
13. J. W. Krause
14. John P. Krempel
15. A. C. Martin
16. H. H. Martin
17. S. B. Marston
18. Octavius Morgan
19. S. T. Norton
20. T. F. Power
21. A. F. Rosenheim
22. F. L. Stiff
23. J. T. Vawter
24. A. R. Walker
25. H. F. Withey
26. F. R. Schaefer

As guests of the Chapter were present: W. E. Prine, of the Southwest Contractor and John Bowler of the Builder and Contractor.

The minutes of the seventy-fourth meeting of members were read and adopted.

Vice-President A. C. Martin presented the annual address, followed by the annual report of the Secretary.

Upon motion duly seconded and carried, a vote of thanks was tendered by the Chapter to the acting Secretary.

The President's address and the various reports were ordered to be spread upon the minutes of the meeting.

From Fernand Parmentier to Octavius Morgan stating his intention of remaining in Europe during the conflict. This communication was ordered spread on the minutes.

Communications were next read from Carl F. Gould, President, and Myron Hunt, Vice-President, of the Architectural League of the Pacific Coast, inviting representatives to the next Convention of the League. The reply as written on September 25th by A. C. Martin, the acting President, was endorsed.

From Theodore Hardee, inviting exhibits at the Panama-Pacific International Exposition. A resolution was adopted that this Chapter should not take part in an exhibition, for reasons set forth in a resolution adopted by the Board of Trustees of the Institute.

From the San Francisco Chapter, A. I. A., calling attention to the above mentioned resolution of the Board of Trustees. It was ordered that this communication should be answered with a statement of the Chapter's position.

From Edgerton Swarthout, Chairman of the Committee on Government Architecture of the American Institute of Architects, calling the attention of the local Chapter to Legislation about to be passed covering the architectural work for the building of the Department of Justice. The Secretary was instructed to communicate with Senator John D. Works, and Representatives from the Southern Districts of the State in the interests of the architectural profession in this matter of legislation.

From the Illinois Chapter of American Institute of Architects, requesting the endorsement of the candidacy of Mr. Elmer C. Jensen for Fellowship. While this communication was received too late for local Institute members to appear on the Nominating Petition the Chapter nevertheless ordered that a communication be sent to the Illinois Chapter expressing unanimous approval and wishing success in Mr. Jensen's ultimate election.

Communications were next read from A. C. Kemper, acting Executive Secretary of the American Institute of Architects calling the attention of the Chapter to certain items of business requiring immediate attention. First, the election of delegates and alternates to the Convention, which meets in Washington on December 2nd, 3rd and 4th; and second, the submitting of the Chapter's report to the Secretary of the Institute, to be prepared conjointly by the President and Secretary of the Chapter.

A communication was read from M. L. Schmidt, Manager of the Metropolitan Exhibit, suggesting the holding of a reception for members of the Institute and their clients at a date to be determined upon, in the exhibition rooms. After general discussion it was resolved that in place of such a form of endorsement by the architects as outlined, that the Institute should accord Miss Schmidt their co-operation in the form of a communication which could be used by her in furthering her work. It was further ordered that this communication should be written by Mr. Elmer Grey.

Nomination and election of officers was next in order.

Frank L. Stiff, seconded by John P. Krempel, placed in nomination the name of Mr. A. C. Martin for President. On motion made, seconded and duly carried, the nominations were closed and the Secretary instructed to cast the ballot. The Secretary announced the ballot for Mr. A. C. Martin as President, who was thereupon proclaimed by the Chair unanimously elected for the ensuing year.

For Vice-President, Mr. John C. Austin, seconded by J. E. Allison, placed in nomination the name of Mr. S. Tilden Norton. Mr. Frank Hudson, seconded by John P. Krempel, placed in nomination Mr. J. J. Blick. Upon motion of Mr. Backus, duly seconded and carried, nominations were declared closed. Vote was ordered to proceed by ballot, the Chairman appointing the following tellers: W. J. Krause, and J. J. Backus, who distributed blank ballot slips among the members. Ballots returned tallied as follows:

S. Tilden Norton, 17.

J. J. Blick, 8.

A total of twenty-five ballots were cast. It was moved by J. J. Blick that Mr. Norton's election be made unanimous, whereupon the Chair declared Mr. S. Tilden Norton unanimously elected as Vice-President of the Chapter for the ensuing year.

For Secretary, it was moved by A. R. Walker, seconded by A. F. Rosenheim, that Fernand Parmentier be declared elected by acclamation. This motion was unanimously passed and the acting Secretary ordered to cast the ballot, whereupon the Chair declared Fernand Parmentier elected Secretary for the coming year.

Upon suggestion by the President, Mr. A. C. Martin, a motion was duly put, seconded and carried that A. R. Walker be appointed to the office of acting Secretary during the absence of Fernand Parmentier.

The election of Treasurer next being in order, it was moved by Mr. Morgan, duly seconded, that Mr. August Wackerbarth be elected by acclamation to succeed himself for the ensuing year, and the Secretary be instructed to cast the ballot, whereupon the Chair announced Mr. Wackerbarth elected for the ensuing year.

Nominations were next called for Directorship of the unexpired term of Mr. S. Tilden Norton, who was elected to the Vice-Presidency, and for the three-year term left vacant by Mr. Octavius Morgan. Mr. J. E. Allison and Mr. J. J. Backus were duly nominated and seconded, whereupon nominations were declared closed and vote was ordered to proceed by ballot. The candidate receiving the greater number of votes to receive the three-year term. The tellers distributed blank ballot slips among the members and the ballots returned tallied as follows:

J. E. Allison, 15.

J. J. Backus, 9.

A total of twenty-four ballots were cast; whereupon the Chair declared that J. E. Allison would serve as Director for the three-year term and that J. J. Backus would serve the unexpired term left vacant by the elevation of S. Tilden Norton.

Upon the call of the Chapter members, the newly elected President and Vice-President each in turn addressed the Chapter in brief remarks.

The appointment of Committees was deferred by the President until a later date.

The election of delegates to the Forty-eighth Annual Convention of the Institute to be held in Washington on December 2nd, 3rd and 4th, was next in order. The following were elected by acclamation after having been duly nominated and seconded by members present. For delegates, Octavius Morgan, A. F. Rosenheim, John C. Austin, A. C. Martin, John Parkinson. For alternates, John P. Krempel, Frank D. Hudson, Myron Hunt, Theodore A. Eisen, Elmer Grey.

Upon motion duly made and properly passed, the Secretary was instructed to communicate with the Secretary of the Institute regarding the accrediting of delegates by the acting Secretary in the absence of Fernand Parmentier.

It was moved by Frank D. Hudson, seconded and passed, that the acting Secretary communicate with the Institute authorities recommending the election of Fernand Parmentier, Robert D. Farquhuar and John P. Krempel to the Fellowship.

Upon proper motion made, an extension to his leave of absence was granted to Fernand Parmentier, the time to be fixed by the Board of Directors.

Following the above, discussion was entered into, led by Mr. Grey, relative to certain Hollywood competitions; and further discussion by Mr. Krempel relative to the 1915 Convention.

It was reported by Mr. J. E. Allison for the Committee on the Law of 1872 that an appeal from the Superior Court's decision covering a case of compulsory competition had been made in an Imperial Valley case, and that the local Committee in order to strengthen this case before the Appellate Court had employed the services of Seward Simons, whose bill for preparing the brief filed was $250.00. Moved by Mr. Morgan, seconded by Mr. Rosenheim, the Chapter was authorized to pledge $20.00 as an organization toward this bill, and the balance was to be raised by subscription among the members.

After various other discussions the meeting adjourned at 10:30 p. m.

FERNAND PARMENTIER,
Secretary.

By A. R. WALKER,
Acting Secretary.

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OREGON CHAPTER, A. I. A.

Held at the University Club, September 7, 1914.

Meeting called to order by President Whitehouse. Wm. G. Holford appointed Secretary pro tem in the absence of Secretary Lawrence. Those present were Messrs. Schacht, Lazarus, Thompson, Beckwith, Mayer, Fouilihoux, Naramore, Hogue, Hoffman, Doyle, Whitehouse and Holford.

Minutes of the last meeting were accepted as printed.

REPORTS OF COMMITTEES.

Committee on Competitions—Mr. Mayer reported that a letter had been written to the San Francisco Chapter inquiring about Louis Hobart participation in the recent Portland Postoffice Competition, but no answer to date had been received.

Educational Committee—Mr. Holford reported on exhibition at San Francisco, that the following letters have been received from the San Francisco and Washington Chapters in response to an inquiry concerning exhibiting at the Panama-Pacific International Exposition.

July 22, 1914.

Theodore Hardee,
Chief of the Department of Liberal Arts, Panama-Pacific International Exposition,
San Francisco, California.

Dear Sir: I am directed by Mr. Geo. B. McDougall, the President of the San Francisco Chapter, A. I. A., to advise you as to the matters contained in your communication of July 15th.

As you may know, the question of an architectural exhibit was presented to the Chapter about a year ago, and at that time was referred to the Institute at Washington for advice as to the proper course to be pursued. A committee was appointed by the Institute for the purpose of making a report. At the meeting of the Executive Committee of the Institute, held on May 16, 1914, the following resolution was adopted:

"Resolved, That in view of the fact that the buildings of the Panama-Pacific International Exposition are in themselves a more definite exhibition of architecture than drawings, and more generally interesting to the public, the Institute does not desire to make an exhibit of drawings, and suggests that the Director be asked to insert a notice to this effect in the catalogue of the Exhibition of Fine Arts."

The San Francisco Architectural Club is planning an exhibition during the Exposition period, and this Chapter does not wish to do anything that might be considered as effecting the Architectural Club Exhibit, and therefore, will not be an applicant for any space as a Chapter.

However, your communication will be read at the August meeting of the Chapter, and should any individual member desire to make an exhibition he will be advised that he can communicate with your department.

Yours very truly,
(Signed) SYLVAIN SCHNAITTACHER,
Secretary.

Mr. Wm. G. Holford,
Chairman Educational Committee,
Portland, Oregon.

My Dear Mr. Holford: Your letter of the 28th inst. at hand. This Chapter has never taken any action in regard to placing an exhibit in the Panama-Pacific International Exposition and the matter has never been brought to the attention of the Chapter.

Can you give me any further information in regard to it, or tell me where I can obtain it?

We do not have any meeting until the 1st of October, and at that time I will bring it to the notice of the Chapter and advise you what action we take in regard to it.

Yours truly,
ARTHUR L. LOVELESS,
Secretary.

Committee on Quantity Survey—Mr. Hogue reported as follows:

REPORT OF THE QUANTITY SURVEY COMMITTEE.

The Committee wishes to record the use of the Quantity Survey by Commissioner Dieck of the Department of Public Works in the estimates for the new city barn, to be built by the city of Portland. This, we understand, makes the fourth use of the Quantity Survey in the United States, it having been used in the following order: 1. San Francisco; 2. Wilmington; 3. Boston; 4. Portland.

The Committee wishes to present for endorsement the enclosed report on standardization of building materials; this Committee have been delegated to represent the Chapter in the joint committee which makes the report.

The report has been endorsed by the other two organizations represented in the joint committee, the Builders' Exchange and the Manufacturers' Association.

CHESTER J. HOGUE,
Chairman.

It was moved, seconded and carried that this report be accepted and the report of joint committee on Standardization as published in the Manufacturers' Journal be endorsed by the Chapter.

Committee on Specifications and Contracts—Reported that their findings had been handed to the Executive Committee and through them forwarded to Mr. Day, Chairman of the Institute Committee.

CORRESPONDENCE.

A letter from Mr. Swartwout, Chairman of Committee on Government Architecture, was read in reference to House Bill H. R., 13,870, in regard to the Department of Justice.

It was moved, seconded and carried that the Secretary be instructed to write the Oregon Senators concerning this bill.

Mr. Beckwith asked that the Chapter appoint a committee to confer with a Committee from the Architectural Club on the future of the Atelierand Club. There being no objection, President Whitehouse appointed Messrs. Doyle, Johnson and himself as the Committee.

According to the Constitution, nominations for officers were called for, the ballots resulting as follows:

Nomination for President—Messrs. Doyle and Whitehouse.
Nomination for Vice-President—Messrs. Johnson and Hogue.
Nomination for Secretary—Messrs. Holford and Lawrence.
Nomination for Treasurer—Messrs. Fouilihoux and Naramore.
Nomination for Trustees—Messrs. Jacobberger, Lawrence, Lazarus and Naramore.

There being no further business the meeting adjourned.

WM. G. HOLFORD,
Secretary Pro Tem.

The regular meeting of the Washington State Chapter of the American Institute of Architects was held at the Arctic Club, on the evening of October 7th, preceded by dinner, fifteen members being present, also Mr. Marshall A. Dean of Ellensburg, Wash.

It was decided to hold an exhibition of the drawings entered in the Elks' Club competition at Tacoma, Wash., in the rooms of the Seattle Fine Arts Society during the coming convention of the A. L. P. C., October 15-16, and the matter was turned over to the Exhibition Committee.

The main part of the discussion related to the plans for the coming convention of the A. L. P. C. and the program for the meetings.

ARTHUR L. LOVELESS,
Secretary.

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STATEMENT OF THE OWNERSHIP, MANAGEMENT, ETC., of The Pacific Coast Architect, published once a month in San Francisco. This is the sworn statement required by the Act of Congress passed August 24, 1912.

Name of Editor—J. A. Drummond; Business Manager—J. A. Drummond; Publisher—J. A. Drummond, 725 Chronicle Building, San Francisco.

Owners: (If a corporation, give names and addresses of stockholders holding one per cent or more of total amount of stock). None.

(Signed) J. A. DRUMMOND,
Publisher.

Sworn to and subscribed before me this nineteenth day of September, 1914.

(Seal) W. W. HEALEY,
Notary Public, City and County of San Francisco.
(My commission expires August 28, 1917.)

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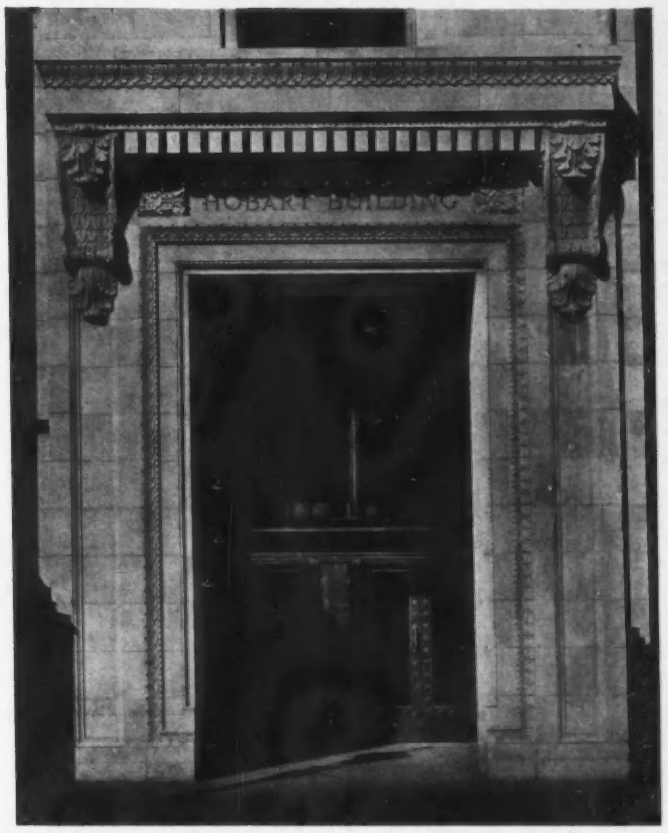

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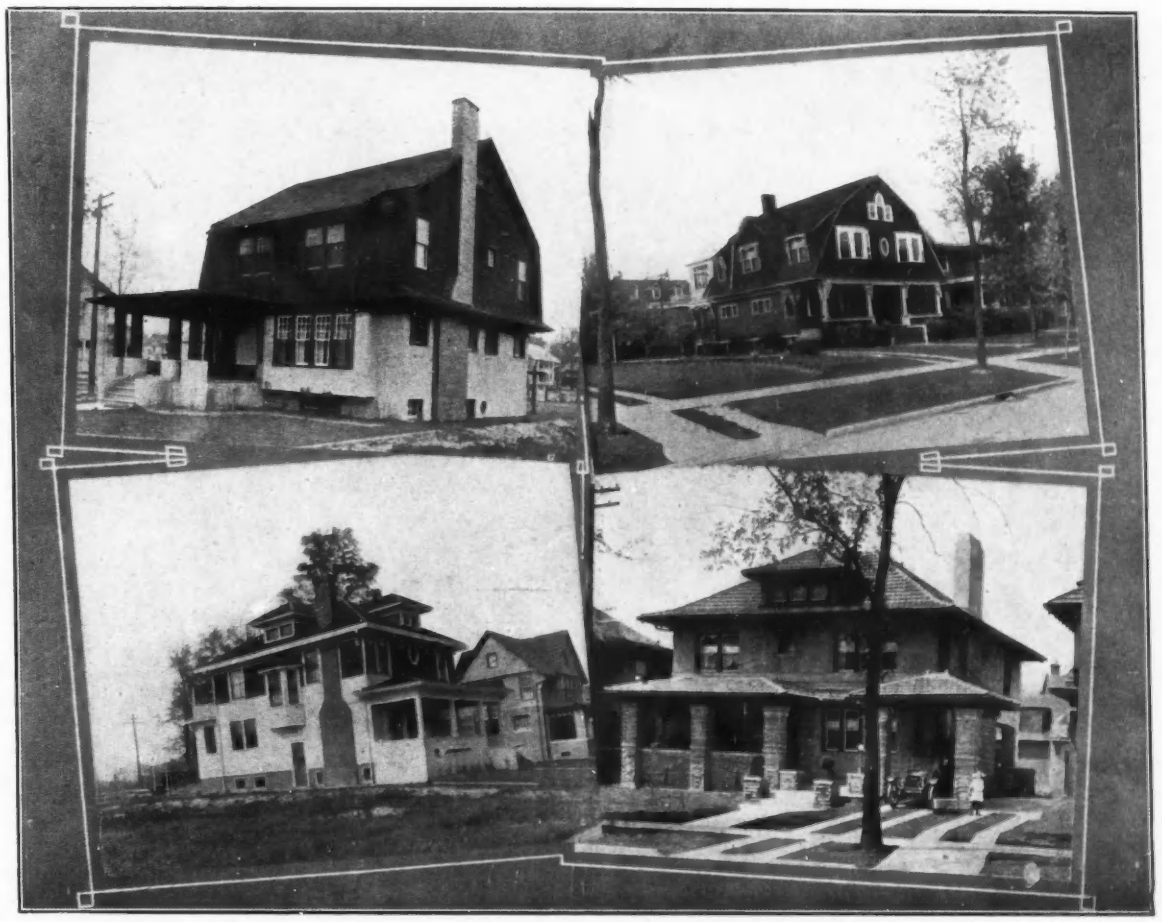

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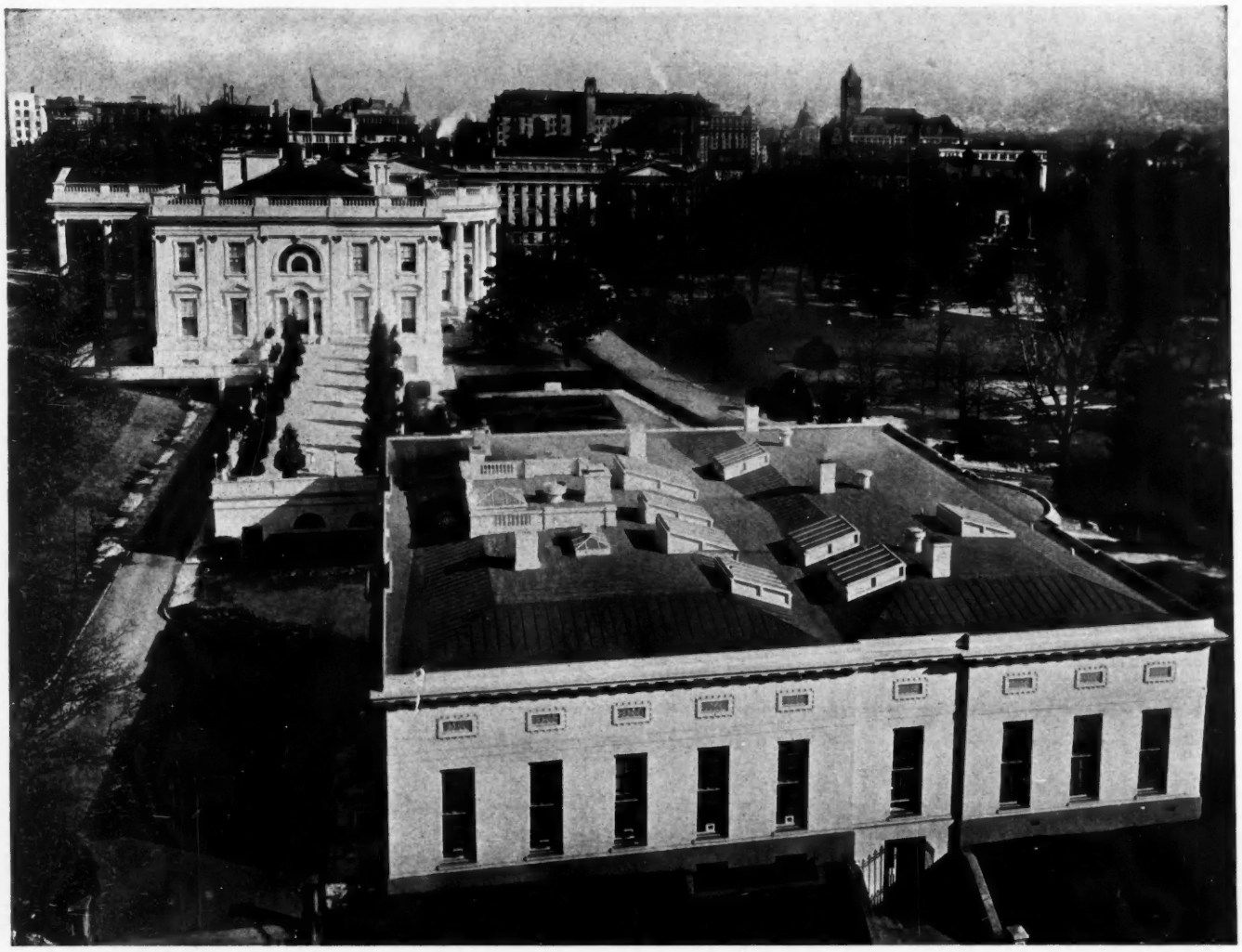

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725 Chronicle Bldg., San Francisco

FREDERICK HOHWIESNER
RESIDENCE
2160 Lake Street
San Francisco

NATHANIEL BLAISDEL, Architect
San Francisco

Red Pressed Brick and Terra Cotta Vases used in this residence

MANUFACTURED BY

Steiger Terra Cotta & Pottery Works

At its tidewater plant
South San Francisco
San Mateo County, California

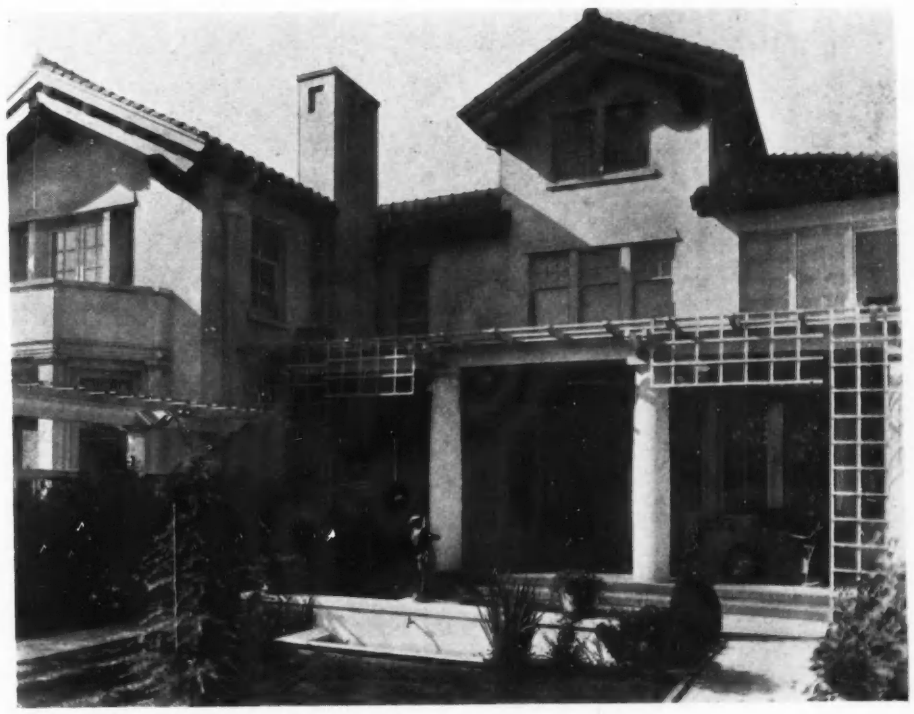
MAIN OFFICE
739 Mills Bldg., San Francisco

COURT
T. M. SHEARMAN
Residence
Berkeley, California

ROOFED WITH

Red Terra Cotta Italian Tile

W. H. RATCLIFF, Jr.
Architect
Berkeley, California



Los Angeles Pressed Brick Co.
FROST BLDG., LOS ANGELES
Manufacturers

United Materials Company
5 CROSSLEY BLDG., SAN FRANCISCO
Distributors, Northern California

RESIDENCES IN BRICK
ARE THE MOST SUBSTANTIAL AND
ARTISTIC CONSTRUCTION

NO PAINTING REQUIRED.
UPKEEP EXPENSE LOWEST.

BRICK BUILDERS BUREAU

SAN FRANCISCO

G. W. HOOPER RESIDENCE
1300 Jones St., San Francisco

FRED B. WOOD, Architect
San Francisco

Long Roman Brick with Architectural Terra Cotta Trimmings

USED FOR THIS RESIDENCE

Manufactured by

GLADDING, McBEAN & CO.

Office:
CROCKER BUILDING, SAN FRANCISCO

Factory:
LINCOLN, CALIFORNIA

Residence of MRS. CYRUS WALKER
Jackson and Gough Sts.
San Francisco

FRANK S. VAN TREES, Architect
San Francisco

Cream Brick used, were manufactured and supplied by

N. CLARK & SONS

OFFICE: 116 NATOMA STREET
SAN FRANCISCO

FACTORY: WEST ALAMEDA
CALIFORNIA